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TO THE PUBLIC.

The New England Railway and Manufactures' Statistical Gazetteer, the first of its kind ever published, is at last completed and presented for your inspection and approval. The enterprise was much larger, the information given is more complete, and the work more voluminous than was at first anticipated. Notwithstanding the many obstacles that have arisen, every manufacturing establishment on the lines of the railroads throughout New England has been applied to for information. In many places the same was refused; when, upon a second application, we obtained for our perseverance information from most of them. A few representative establishments do not appear. While we offer an apology for their non-appearance, we feel it just to ourselves to add that every reasonable exertion was made to approach them favorably, but without success. Fire, that destroying element which frustrates and delays what man proposes, destroyed the printing house where this work was printed, delaying its issue.

Many sketches of establishments found in this work were taken from newspapers and handed to us, not knowing what sheet they were taken from. To these papers we feel deeply indebted. Our thanks are also due to the *Boston Commercial Bulletin*, *Boston Journal*, *United States Economist and Reporter*, *Providence Evening Press*, *Waterbury American*, and *New Bedford Mercury* for favorable notices of our enterprise; to Hon. Calvin Merrill, of St. Johnsbury, Vt.; *Lippincott's Gazetteer of the World*, *Hayward's Gazetteer of New England*, *Andrew Boyd's Newport Directory*, and others, for valuable statistics and information given; and to the manufacturers of New England generally for their patronage and encouragement.

In due time, when practicable, a new edition will be issued improved and corrected.

Having toiled earnestly and faithfully, conscious of having done our duty, gratified with our success, and hoping the work will be received favorably and its usefulness felt generally, we confidently launch this volume upon the sea of public favor.

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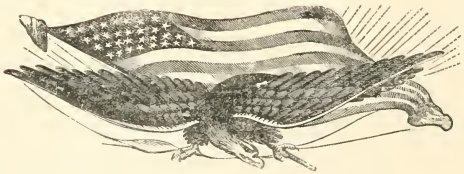

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MANUFACTURERS OF FINE

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PROVIDENCE, R. I.

FALL RIVER LINE

FOR BOSTON,

VIA FALL RIVER DIRECT.

The world-renowned Steamers

BRISTOL AND PROVIDENCE,

Comm'r. BRAYTON, **Comm'r. SIMMONS.**

Will leave (Alternate days) daily, from Pier 30 North River, (foot of Chambers street,) at 5 P. M.

Dodworth's Celebrated Orchestra, Grand Promenade Concert every evening.

THE ONLY LINE RUNNING SUNDAY NIGHT.

These Steamers are the fastest and most reliable boats on the Sound built expressly for speed, safety and comfort. This Line connects with all the Southern Boats and Railroad Lines from New York going West and South, and convenient to the California Steamers.

CABIN, $3.00. DECK, $1.00.

BAGGAGE checked through and transferred in New York free of charge.

Providence passengers by the above steamers will leave Fall River at 5.30 A. M. Arriving at 6.30 A. M. Returning will leave Providence at 5 P. M., making direct communication with the boat, and allowing a good night's rest on board each way. To better accommodate the public, the splendid steamers

NEWPORT AND OLD COLONY,

Comm'r. Lewis, **Comm'r Miller.**

Will leave (Alternate Days) Daily, (Sundays excepted,) from Pier 28 North River, (foot of Murray street,) at 6.30 P. M., for BOSTON via NEWPORT. Freights received at Pier 30, up to 5 P. M., and at Pier 28 up to 6.30 P. M., each evening.

TO SHIPPERS OF FREIGHT.

This Line with its new and extensive Depot accommodations in Boston, and large Pier in New York, (exclusively for the business of this Line,) is supplied with facilities for freight and passenger business which cannot be surpassed. Freight taken at low rates, and forwarded with dispatch.

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SUNDAY NIGHT LINE, Cars leave Boston every Sunday evening connection as above at 6.30 P.M.

The Office, 3 Old State House, will be open every SUNDAY AFTERNOON from 2 to 6 o'clock, and at the Depot from 9 to 10 A. M., and from 5 to 6 P. M., for sale of Tickets and Staterooms.

Steamers leave New York, daily, SUNDAYS INCLUDED, from Pier 28 North River, foot of Murray St., at 5 P. M.

JAMES FISK, Jr. President.

M. R. SIMONS, Managing Director,

CHAS. H. VAILE, Gen'l. Passenger Agt.; H. H. MANGAM, Freight Agt.

EXTERIOR VIEW OF THE GREAT COLISEUM, ST. JAMES PARK, Boston, Mass.

Built for the National Peace Celebration and Musical Festival, held in that city, June 15th, 16th and 17th, 1869.

MAINE.

AUBURN, 33½ miles from Portland, 104½ from Bangor, situated opposite Lewiston, on the Maine Central Railroad. Population 10,000. Auburn was made a city February 22, 1869. The town of Danville was annexed to Auburn in 1867.

The manufactures here are as follows:

WILLIS, PARKER & CO. occupy a three-story wooden building, 20×60 feet, also a building, 20×24 feet, one story, for the manufactory of flour. They consume 15,000 bushels of wheat and rye, and 4,000 barrels of flour each year, \$150,000 pounds of wool per year. Their machinery is driven by one 100-horse engine. Others and one county rate paper weights. They do business amounting to \$70,000 per annum.

C. F. PACKARD & CO., occupy a brick building, three stories, 30×50 feet, located on Main street, for the manufacture of boots and shoes. Commenced business in 1847. Employ two hundred hands. They use eight stitching and eight binding machines. Consume 300 sides of sole leather per week, producing 3,000 cases per year. Do business amounting to \$200,000 per annum.

PEASE, STOCK & CO., occupy two floors in a brick building, 30×60 feet, located on Main street, for the manufacture of men's and boys' calf boots. Commenced business in 1866. Employ 25 hands. They consume 60 sides of sole leather, 75 dozen of calf skins, 100 sides of kip leather and 50 dozen sheep skins and turn out 50 cases of boots per month and do business amounting to \$60,000 per annum.

TIBBS & DENNIS occupy a two-story wooden building, 24×40 feet, on Main street, for the manufacture of women's shoes. Commenced business in 1864. Employ 28 hands. They consume 50 sides of sole and 300 pounds of upper leather per week, producing 3 cases per day, and do business amounting to \$70,000 per annum.

B. B. PEVEAR & CO. occupy a wooden building 40×80 feet, 30×45 feet, also one floor of a two-story brick building, located on Main street, for the manufacture of boots, shoes and stitchings. Commenced business in 1865. Employ 60 hands. They use 100 gross shoes, 1,500 pair of soles and 1,000 pairs of leather per day. Do business amounting to \$90,000 per annum.

GEORGE HILL, occupies a wooden building, two stories, 40×60 feet, located on Railroad street, for the manufacture of harness shoes. Commenced business in 1868. Employs fifty hands. Runs a stitching machine and turns out 240 pairs per day. Does business amounting to \$20,000 per annum.

H. CLOUGH & CO. occupy a four-story wood building, 40×100 feet; engine below, 40×20 feet, located on Court street, for the manufacture of boots and shoes. Commenced business in 1867. Employ one hundred and seventy-five hands and turn out 1,000 pairs boots and shoes per week. Their machinery is driven by an engine of ten horse power built by C. Staples & Son of Portland. They use two McKay sewing and three stitching machines, and do business amounting to \$300,000 per annum.

M. CRAIG & CO. occupy a two-story wooden building, 40×72 feet, located on Main street, for the manufacture of boots and shoes. Commenced business in 1867. Employ thirty hands. They use 12 cases per week, and consume 4,000 sides of sole and 20,000 pounds of upper leather, and do business amounting to \$80,000 per year.

MILLER & BARNES occupy a two-story wooden building, 110×40 feet, located on Main street, for the manufacture of boots and shoes. Commenced business in 1870. Employ seventy hands. They consume 100 cases of kip and calf and turn out 4,000 cases per year. They also occupy a brick building, three stories, 37×45 feet, for the manufacture of ladies' shoes, and manufacture \$60,000 worth a year. Their machinery is driven by an engine of forty horse power, built by C. H. Reynolds & Co. of Auburn, Me., with wooden ladies, one 20-foot bore, one valve 30 foot bore, 42 stroke for diameter, built by Frederick Co., of Portland. They do business amounting to \$100,000 per annum.

N. H. MORRISON occupies one floor of a wooden building, 24 stories, 17×84 feet, on Railroad street, for the manufacture of ladies', misses' and children's shoes and boots. Commenced business in 1865. Employs twenty-two hands. Consumes 1,000 pounds of sole and 2,000 pounds of upper leather, producing 3,000 cases per month. Does business amounting to \$40,000 per annum.

J. F. CRAM & CO. manufacture women's pegged shoes. Commenced business in 1848. Occupy a brick building, 24×100 feet, four stories, located on Main street. Employ 300 hands. Consume 15,000 pounds of sole and 8,000 pounds of upper leather, producing 700 cases of shoes per week. They use seven stitching and binding machines and do business amounting to \$750,000 per year.

L. A. CRAM & CO. occupy one floor of a wooden building on Railroad street, for the manufacture of turned boots and shoes. Commenced business in 1866. Employ twenty hands. They consume two pounds of silk thread and purchase 6 cases per week. Have four stitching machines and do business amounting to \$12,000 per annum.

H. O. CLOUGH & CO. occupy a wooden building 24 stories, 24×60 feet, on Railroad street, for the manufacture of ladies' and misses' cannel boots. Commenced business in 1870. Employ twenty hands. They use 60 pairs per day. Have one McKay machine and two stitching machines and turn a business amounting to \$40,000 per annum.

AUGUSTA, capital of the State, situated 37 miles from Skowhegan, 63 miles from Portland, 171 miles from Boston, 214½ miles from Providence, on the Portland & Kennebec Railroad, was founded in 1754, and became a city in 1849. It is bounded on the north by Sidney and Vassalboro', east by Windsor, south by Hallowell and Chelsea, and west by Manchester. It is located on both sides of the Kennebec river, and is at the head of navigation, except by small vessels. The surface of the country is hilly, and the scenery is among the finest in New England. Population about 8,500. It is becoming a favorite resort for pleasure seekers, who find excellent facilities for hunting and fishing in the neighboring localities. The valuation of real estate in 1868 was $2,538,118; personal property, $1,945,314. The valuation of real and personal is $4,483,432. There are seven churches located here, of which one is Methodist, one Baptist, one Free Will Baptist, one Universalist, one Congregational, one Unitarian, and one Catholic; also contains three banks, one savings bank, and five newspapers. The extensive water power here has been purchased by the A. & W. Sprague Manufacturing Co., of Providence, R. I., who intend erecting large cotton mills. The hotels are the Augusta House, Mansion House, and Cushnoc House. The Maine Insane Hospital is located on the east side of the Kennebec River, one mile from the city proper, and is a granite structure, with a capacity for the accommodation of 300 patients, and was erected at an expense of about $300,000; a farm of 235 acres, which is mainly worked by the patients, and is under a high state of cultivation. A United States Military Asylum, established by the United States, in 1866, at a cost of $50,000, located four miles from the city, at Togus Springs, has accommodations for 200 persons. A farm of 600 acres is connected.

KENNEBEC U. S. ARSENAL. The arsenal is situated on the east bank of the Kennebec river, and contains 40 acres of land, inclosed by an iron fence.

THE KENNEBEC DAM, a magnificent structure, bold in its design, curious in its workmanship, was commenced in 1836 by the Kennebec Locks & Canals Co., and completed in September, 1837. The cost was about $300,000; constructed under the superintendence of Col. William Boardman, of Nashua, N. H., as chief engineer.

Augusta has seven powers,—two powers on small streams, capable of but a small amount of work.

Four powers upon the Bond brook, four dams in two miles, mills upon each, room for others. Stream rather variable in volume, but capable of very great improvement by artificial connection with large ponds in the vicinity.

The Kennebec Dam Power, on the Kennebec river, is at the head of tide, and within the immediate limits of the city proper.

Height of the fall, fifteen feet; part vertical and part on a sloping apron about forty feet wide. It is now in contemplation to increase the height of the dam by three feet for the present.

Volume of water, about 130,000 cubic feet per minute at the lowest run of summer. The *average* summer run is estimated at 175,500 cubic feet per minute. [Statement founded upon the observations of 1866 and '67.]

The power due to the average summer run is about 5,000 (4,986) gross horse powers, or 3,660 net horse powers. Col. DeWitt judges that 332,000 spindles with preparation on print cloths can be driven with this power, his estimate being based on his large experience in Rhode Island. This implies the best of machinery of all descriptions, capacious canals, and the most judicious use of the power.

The lay of land is by no means favorable for the erection of mills with the appurtenant boarding houses, yards, etc.; but understood to be susceptible of improvement adequate to all practical necessities.

The best of granite is close at hand; also unlimited quantities of clay for bricks; the country above furnishes lumber and fuel in all required amounts.

Owned by the A. & W. Sprague Manufacturing Co.; Agent and Engineer, Col. H. A. DeWitt.

Improvements on this power on a vast scale are now in prospect and in the early stage of execution. Six hundred acres of land have been purchased, extending a mile and a half on the east side of the river and a mile and a quarter on the west side. A brick yard is in operation, capable of producing 100,000 bricks per week. Townships of timber land have been purchased, saw mills bought and built, etc., so that a great manufacturing city may reasonably be looked for as certain speedily to arise upon this privilege.

Some ——— horse powers of steam are employed at present in processes more or less closely connected with the water-power manufacturing, and the amount will doubtless greatly increase as the water-power comes into larger use.

Augusta is connected with the seaboard by a line of railway, is about three hours distant from Portland, and eight from Boston. For about eight months of the year the river is open to the city, admitting the approach of vessels.

The proper utilization of the lakes and ponds upon the Kennebec for reservoir purposes will undoubtedly treble the working capacity of the Kennebec Dam power and others above. There are probably 300 square miles of lake surface available for storage improvement, the lakes being many of them of large size. In addition, artificial reservoirs thousands of acres in extent can be constructed at moderate cost.

"THE A. & W. SPRAGUE MANUFACTURING CO., in connection with the Kennebec Land and Lumber Co., have it in view to raise and improve the dam at Moosehead lake, and to control the flow of water therefrom." They have identified themselves quite conspicuously with the interests of this city. They are making many improvements that cannot but be of value to Augusta. The old mill has been enlarged by putting on an additional story, so that now it is 200 x 50 feet, five stories, brick. It contains 10,000 spindles and 200 looms. The amount of cotton consumed is 1,200 pounds per week, producing 52,000 yards of 36-inch sheetings 42 x 46. They employ 150 persons. A new mill is now in process of erection, situated just north of the old one. It is designed to be 74 x 212 feet, five stories, brick. They also contemplate many other improvements, which have not progressed far enough as yet for us to give any reliable information, such as raising the dam, increasing the power, etc. H. A. DeWitt, Agent; N. W. Cole, Superintendent.

SMILEY & CHURCH occupy one floor of a building for the manufacture of broom and brush handles, commencing here in 1867. They employ five persons, and produce 250,000 handles annually.

A. COWEE & SON commenced the manufacture of bedsteads and ship furniture several years ago. They occupy four floors, 40 x 60 feet each, and employ eighteen men.

DAVID KNOWLTON & SON occupy one floor, 40 x 50 feet, for the manufacture of furniture, employing six men.

E. & J. ATKINS & Co. occupy two floors for the manufacture of boxes and shooks, commencing here in 1868. The business was established some twenty years ago by E. Atkins & Co. They employ eight men. They also manufacture barrel heading, pump and aqueduct tubing.

FREEMAN BARKER occupies one floor, 50 x 96 feet, for the manufacture of barrel heading, commencing here some fifteen years ago. He employs six men, and produces 700 pairs per day.

J. M. Longfellow & Co. occupy one floor, 48 x 60 feet, for the manufacture of boxes, clapboards, planers, etc. They employ four men.

J. P. Wyman & Son commenced the manufacture of doors, sashes, and blinds in 1856. They occupy a building 45 x 110 feet, two stories; employ fifty men, and saw 1,200,000 feet of lumber, annually, into doors, sashes, and blinds. The mill is on Bond brook, the fall being 12 feet. Two Blake wheels supply the power.

Augusta Iron Foundry, T. Lambard, Proprietor, occupy a two-story wooden building, 80 by 50 feet, used as a machine shop, a pattern shop, 40 x 60 feet, four stories, and built of brick, a foundry, 40 x 120 feet, one story, and built of stone, a forge shop, 40 x 20 feet, built of stone, a plough shop, 40 x 40 feet, two stories, with three large buildings used for storing lumber, etc.; the whole covering about two acres of ground, and located on the east side of the Kennebec river, for the manufacture of castings of every description, freight cars, mill work, etc. The business was established in 1833, and gives employment to thirty persons; melts 5 tons of iron per week, and turns out 100 cars per annum, doing business to the amount of $60,000. Their machinery is driven by an engine of twenty-four horse power, built by I. F. & G. B. McClench of Hallowell, Maine, with a flue boiler, twenty-five horse power, built by Allen & Endicott of Cambridgeport, Mass. Office, No. 12 Bridge's Block, Water street.

Allen, Small & Co. occupy two floors, 50 x 18 feet, located in Journal Block, for the manufacture of wood working machinery, mill work, shafting, and general machinery. Business established in 1866, and employs three hands. Their machinery is driven by an engine of six horse power, with an upright tubular boiler, built by Cook, Rhymes & Co. of Charlestown, Mass.

I. C. Hovey occupies two floors of a three-story wooden building, 45 x 26 feet, located at No. 109 Water street, for the manufacture of church and cabinet organs and melodeons; commenced business in 1854, has three employees, and does a business of $12,000 per annum.

Kennebec Land and Lumber Co., wholesale and retail dealers in ice, and all kinds of lumber. Ira D. Sturgis, President; J. M. Haynes, Treasurer. Office in Augusta. Incorporated in 1867. Capital stock $250,000. They have one water saw mill in Augusta, and two large steam saw mills, one in Augusta, and one in Pittson, 6 miles below, on Kennebec river, where they have also extensive ice houses. This company supply their mills with lumber cut by them on their own lands, and ship much of it to various markets in their own vessels.

BANGOR is situated on the Penobscot river, at the head of tide water, and about 60 miles from the sea. It is 120 miles N. E. by E. from Portland, 66 miles N. E. from Augusta, and about 230 miles N. E. from Boston, Mass. Bangor is the capital of Penobscot County, and one of the principal cities of the State.

The site of the city was first visited by the French, under Champlain, in 1605, and in 1613, the French Jesuits contemplated the establishment of a mission here, but from some cause failed to do it. The first white resident of Bangor, of whom there is any record, was Stephen Bussell, who, in 1769, built a house on the easterly side of the Kenduskeag stream, upon both banks of which the city is now built. The Rev. Seth Noble was elected the first representative to the General Court, and was directed to procure an act of incorporation of the town under the name of Sudbury. The act was procured in the year 1791. In 1834 it became a city, and the Hon. Allen Gilman was the first Mayor. Until 1812, religious meetings were held in private buildings or school-houses, but at this time a building was erected for a Court House, and was also used as a place of worship. Rev. Harvey Loomis was ordained over the first parish church (Orthodox Congregational,) in 1811, and occupied the desk in the Court House until his church was completed in 1822. The Unitarian church on Main street, the Methodist church corner of Union and Independent streets, and the Baptist church on Harlow street, were built in 1829. The Hammond street church (Orthodox Congregational,) was built in 1834; the St. John's church (Episcopal,) and the Pine street (Methodist,) in 1836. The Columbia street (Baptist) Free church, and the Union street (Methodist) church were built in 1854. The Central church (Orthodox Congregational,) in 1851, and the Essex street (Freewill Baptist) church in 1859. The Universalist church was rebuilt in 1862. There is a church for all denominations on the Pashaw road, which was built some years ago under the auspices of Martin Mower, Esq. The Roman Catholics have a church on York street and a Nunnery on Newbury street. The place where the Spiritualists hold their meetings is on Park street, and is called Pioneer Chapel. A Theological Seminary was established here about fifty years ago, and is now in a flourishing condition. It has four Professorships. Two of its Professors have been appointed Presidents of Bowdoin College, Rev. Leonard Woods, D. D., and Rev. Samuel Harris, D. D. The institution is under the direction of the Orthodox Congregationalists; has a handsome chapel and boarding house, and a fine library. The Court House, County Offices, Jail and House of Correction are in Bangor. The old Court House has been remodelled and now contains the City Hall and City offices. The Custom House, to which is now being made an extensive addition, is of gray granite, situated near the Kenduskeag bridge, and was erected in 1853. This building also contains the Post Office. The Almshouse is well arranged, has extensive and finely ornamented grounds and is a credit to the city. The principal halls are the Norombega and the City Hall. The former was built in 1865, and the lower story is used as market stalls. There are four bridges across the Kenduskeag stream, and one large covered bridge across the Penobscot river from Bangor to Brewer, which town is situated on the easterly side of the river, and will in all probability be incorporated as part of the city of Bangor at no very distant day. Amongst the many useful and philanthropical societies and institutions, the principal are as follows: The Bangor Horticultural Society, which was established many years ago and has done much for the encouragement of that branch of industry in this city and neighborhood. They hold an annual exhibition about the 20th of September, and make a very creditable display of fruit and flowers. The establishment of this society is chiefly attributable to the efforts of Joseph Carr, Esq., of this city; The Bangor Female Orphan Asylum, which is under the patronage of charitable ladies and gentlemen, has been very efficient in the care and primary education of female orphans; The Bangor Musical Association, organized in 1848; The Bangor Mercantile Association, organized November 30th, 1843, incorporated 1844, contains a library of about 8,000 volumes; The Bangor Mechanics Association, incorporated February 28th, 1828. They have a library of over 2,000 volumes, a large collection of minerals and curiosities and over 200 specimens of art. The object of this association is the improvement and elevation, morally and intellectually, of its members. Their hall is in Granite Block.

There are in Bangor, four Insurance Companies, — The Bangor Mutual Fire Insurance Company, incorporated 1858; The Merchants Mutual Marine Insurance Company, incorporated 1851; The Penobscot Mutual Fire Insurance Com-

pany, incorporated 1836, and the Union Insurance Company, incorporated 1862. There is but one Savings Bank, called the Bangor Savings Bank. The number of Banks are nine, as follows: Eastern Bank, capital, $75,000; Farmers Bank, capital, $100,000; First National Bank, capital, $300,000; Kenduskeag National Bank, capital, $100,000; Mercantile Bank, capital: $100,000; Merchants National Bank, capital, $100,000; Second National Bank, capital, $150,000; Traders National Bank, capital, $100,000, and The Veazie Bank of Bangor, capital, $150,000. The Newspapers published in Bangor are the *Whig* and *Courier*, daily, and *The Bangor Jeffersonian*, *The Bangor Courier* and *The Democrat*, weekly. The Hotels of Bangor are numerous and extensive, and are kept in a very liberal manner by experienced gentlemen. The principal are the Penobscot Exchange, on Exchange street, Abram Woodard, Proprietor; the Bangor House, on Main street, O. M. Shaw, Proprietor; Nichols House, on Haymarket Square, J. E. Harriman & Co., Proprietors, and the Franklin House on Harlow street, McLaughlin & Son, Proprietors. The means of communication and connection of the city of Bangor with other parts of the country are by the Maine Central railroad towards the west and southwest, by which route it is 138 miles to Portland and 246 miles to Boston, Mass. It also connects on the south with Portland and Boston by two lines of steamers, and on the north and east by the North American and European railroad and the Bangor, Oldtown and Milford railroad, besides extensive stage communications with all parts of the State.

There are fifty-three schools,—one High, five Grammar, eleven Intermediate, eighteen Primary, twelve suburban, three select, and three mixed, Intermediate and Primary. In these schools are engaged one hundred teachers, and the average number of scholars attending is 2,841 in summer, and 2,801 in winter. The whole number of scholars in the city between the ages of five years and twenty-one years, is 5,407. The valuation of real estate is about $4,496,000. That of personal property is about $3,175,000. Total amount of taxes for the year ending March, 1868, was $240,141.21 Number of voters, 3,336.

The basin at and below the mouth of the Kenduskeag, where the shipping lie to receive their cargoes, is ninety rods in width and affords good anchorage. The tide is generally about seventeen feet. Ship building is carried on to some extent, but commerce in lumber of all the various kinds in use is the principal occupation of the inhabitants. An immense amount of that article is annually rafted down the rivers and transported to almost all parts of the world. Bangor is the great depot for lumber on the American continent.

The site of the city is pleasant, commanding fine views of the river and the adjoining country, and contains 20,000 inhabitants. There are 250 vessels, 208 coasting and 5 fishing vessels. Average tonnage, 95 tons. Whole tonnage, 19,321 52-100. Aggregate burden of vessels owned in Bangor, 33,315 92-100 tons. There were thirteen vessels built here last year. Amount of lumber surveyed in 1868, 220,794,766 feet.

There are six powers here, situated on the Kenduskeag stream, and are known as the falls at "Drummond's Mills," at "McQuestion's Mills," at "Bruce's Mills," at "Hatch's Mills," the "Four Mile Falls," and "Six Mile Falls." These are mentioned in their order, going up the stream from the Post Office.

The height of the falls is estimated at from ten to fifteen feet for each power. The first four, as above mentioned, flow back the Kenduskeag about one mile each; the last or Six Mile Fall flows back over two miles; giving an aggregate, from Drummond's dam to head of flowage of Six Mile Falls, of eight to nine miles.

No estimate given of the powers, in the annual work they would do, or in the annual work done. "The products, similar to our own, of powers on the river and streams north of the Kenduskeag stream, centre at Bangor; and there is no convenient way of making a separate estimate of the products of the power in use here. The Bruce mills, however, could saw from 2,500,000 to 3,000,000 feet of lumber annually."

There is a dam at each of the six powers except at Four Mile Falls. Four of the powers are improved with mills, to wit: Drummond's, McQuestion's, Bruce's and Hatch's mills.

The Kenduskeag stream is naturally connected with a few small ponds; and, artificially, could be readily connected, by an inexpensive two mile canal, with the Pushaw pond, distant about three and a half, from the stream. The Pushaw pond now covers an area of about twelve square miles; and, at little expense in the erection of dams, etc., could be converted into a reservoir of much greater area, wherein the water could be raised and held, five to seven feet above its usual level, to supply the Kenduskeag stream during drouth, or low water, towards the end of summer. The stream is rapid, rises from eight to twelve feet during freshets, but is considered comparatively safe. The supply of water is not large during part of the summer.

The out-cropping and underlying rocks are slate, easily quarried and much used as rough building material.

The lay of the land at *all* the various falls is *suitable*, and at most of the falls extremely favorable, for convenient location of mills and workshops. A small part of the basin of the stream is wooded.

The soil is mostly clayey loam, with some small areas of gravel, and has generally a hard pan of clay. In most localities the soil is very retentive of water; and is relieved only by thorough drainage.

There is one power, "Treat's Falls," on the Penobscot river, one mile above the harbor proper of Bangor, and within one mile of the city Post Office. The total range of the ebb and flow in the harbor one mile below, is from twelve to eighteen feet; range from lowest to highest water on the river proper (above tide) about twelve feet. A dam fifteen feet above mean high tide will pond the water back about four miles. The privilege is owned by Messrs. Leavitt, Weston, and others. For further information respecting the privilege, the statement (or the essential portions of it) of the Engineer of the Hydrographic Survey for the Eastern Division, Hiram F. Mills, Esq., is subjoined:

"The circumstances under which my determination of the volume of the river was made were these: In the spring of 1866 I examined the river and the men connected with the mills from Milford to Bangor, for the purpose of determining the least quantity that flowed in the river in the extremely dry seasons of 1864 and '65, and the greatest quantity in time of freshet. The latter I succeeded in getting quite to my satisfaction, as one of the greatest freshets known occurred during my observations, when there was flowing ninety-six thousand (96,000) cubic feet per second.

The actual quantity flowing in the greatest drought could not at that time be determined; but I was fortunate in obtaining data by which I could, by measurements made at this time, determine the quantity actually *used* in that dryest time, and thus know a quantity which could, with certainty, be relied upon in an extreme drought, and one upon which estimates could be based with safety. This quantity I found to have been nineteen hundred and fifty (1,950) cubic feet per second, exclusive of that used at the sluice for passing rafts.

The quantity here excluded I could not at the time form a judgment upon, as the quantity required was not only that for passing the rafts through the sluice but over the rapids

between the sluice and the race from the mills. This was evidently in excess of the quantity that would be required at a well constructed sluice at Treat's Falls for the passage of rafts; hence I could report that at Treat's Falls there would be supplied constantly through the twenty-four hours in the greatest drought, the quantity necessary for the passage of rafts, together with 1,950 cubic feet per second, that could be applied to manufacturing purposes; and having to report without seeing the river in its lowest stage, I could only, from the data gathered and my measurements, express my confidence that the quantity that can be relied upon is in excess of this, probably twenty-five per cent., possibly fifty per cent.

This quantity was, however, the base of my computation of results, providing, of course, room for the use of any further quantity that could be realized.

With a constant fall of fifteen feet and no pond, the amount of power that could be derived from this water, would be, in gross, 3,315 horse powers.

With the proposed dam at Treat's Falls to a height of fifteen feet above mean high tide, with flash boards two feet high in time of drought, the above amount used in connection with the pond and so much of the tide as can be used to advantage, will furnish during the working hours of the dryest day a power in gross of nine thousand (9,000) horse-powers, leaving the surface of the water at evening, level with the top of solid dam.

During the night the pond will fill to top of flash boards, besides allowing the constant use of 1,473 horse-powers.

The advantage that can be taken of the tide in connection with the large pond above the dam, with the use of turbine wheels is shown in this increase of power from 3,315 horse-powers to 9,000 horse-powers. This result is derived from calculating the experience of the worst day of a dry season in which the circumstances would be, 1,950 cubic feet of water per second being supplied by the river, and high tide a half-hour after starting the factories in the morning, the pond being full to top of flash boards.

This is one of the many cases in which in an unimproved river, the quantity of water flowing and the fall, are items by themselves, quite inadequate to the present capabilities of the river for the development of power.

The 9,000 horse-powers that can be derived from the Penobscot, by the construction of a dam at Treat's Falls, can be increased to 13,500 horse-powers at this point, by constructions up the river, similar to those upon the Merrimack.

The site selected for the dam at Treat's Falls is underlaid by a continuous ledge of good quality throughout, and there is no question of the practicability of constructing a dam there which shall be permanent, and never require repairs that will interfere with the daily use of the water of the river.

The length of the overfall designed is eight hundred and twenty-eight (828) feet. The total length of canals will be a little less than half that in Lowell, to supply the same power to the same area, and the expense of constructing them here will be very light.

The wheels will deliver their water directly into the river, thus obviating the expense of constructing long races at a low level.

The area for factory sites directly below the dam, is ample for the use of the power when fully developed, and remarkably well adapted for this use. Entire safety in time of freshets will be secured.

The material for foundations is very good, being, over the greater part of the area ledge at a convenient depth, and where not of ledge of hard gravel and clay.

Building stone of superior quality for foundations, is found in available positions in the immediate vicinity, and the excellent Brewer bricks are manufactured close at hand.

The expense of constructing factories on these sites will be unusually small, and there will be the great and unusual advantage of both railroad communication and of free navigation in deep tide water, to and from the factory yards."

MANUFACTURERS.

Hinckley & Egery Iron Co., located on Oak street, was incorporated in 1868, with a capital of $150,000. The buildings occupied are, a two story stone building, 40x200 feet, with an ell 40x40 feet, used as a machine shop, a foundry building, built of wood, one story high, 60x85 feet, a two-story wooden building, 40x60 feet, used as a boiler shop, and a storehouse, two stories high, with a number of outhouses containing storehouses, offices, &c. They employ from 75 to 100 hands in the manufacture of steam engines, mill work and all kinds of machinery. They use about 600 tons of pig iron and 100 tons of wrought iron per year. The business was established in 1831 by Hinckley & Egery.

Schwartz, Peavey & Co. occupy a three story wooden building, 50x60 feet, located on Harlow street, for the manufacture of steam engines, mill work, stoves, &c. Employ twenty-five hands. Their machinery is driven by an engine of fourteen horse power, with a locomotive boiler of twenty-five horse power. Commenced business in 1868.

T. Hersey & Co. occupy a five-story brick building, 20 x 73 feet, located No. 20 Main street, for the manufacture of boots, shoes, moccasins, and furs. They give employment to thirty-six hands, and turn out about $150,000 worth per year. The business of this firm was established in 1836 by Farwell & Hemenway. It is their intention to move to Masonic block, a handsome building now in course of erection on Main street. This will give them the finest store in the city.

Wood, Bishop & Co. occupy a three-story stone and brick building, located Nos. 1, 2, and 3 Broad street, and also a foundry building, 50 x 200 feet, located on the Hampden road. The business was established in 1840 by Henry A. Wood. They employ forty hands in the manufacture of tin and sheet iron ware, stoves, ploughs, and ship castings. They make about two tons of castings per day, and do business to the amount of about $150,000 per annum. Their machinery is run by an engine of fifteen horse power.

Job Collett, file manufacturer, Exchange street, occupies one floor of a wooden building, 30 x 90 feet. He commenced business in 1850, employs eighteen hands, turns out about 6,000 dozen files per year, and does a business amounting to $18,000.

William Margesson & Son, manufacturers of men's, boys' and youths' boots, shoes, and moccasins, commenced business in 1849. The buildings occupied by them are located on Columbia street, and are as follows:—two wooden buildings, one of which is three stories high, 36 x 80 feet, and the other two stories high, 20 x 40 feet. They employ seventy-five hands, turn out from 1,500 to 2,000 pairs of moccasins and 25 cases of boots and shoes per week. These goods are all made by hand, and sold in the West and Northwest, principally to lumbermen. A great part of the moccasin leather used by this firm is manufactured at their own tannery, near the old town depot in this city.

C. V. & J. W. Ramsdell occupy a shop in Harlow Block on East Market Square, for the manufacture of guns, gun material, and sporting apparatus. This business was established by C. V. Ramsdell about twenty years ago.

George T. Allamby occupies a two-story wooden building, located No. 23 Central street, for the manufacture of brass, copper, and lead castings; employs four hands. Business established in 1854.

Means & Sanborn, manufacturers of confectionery,

occupy a shop located on Franklin street. Commenced business in 1864.

Whiton & Yeaton occupy a three-story wooden building, 35 x 80 feet, and two two-story wooden buildings, 30 x 75 feet and 25 x 50 feet, located on Harlow street, for the manufacture of carriages and sleighs of all kinds. The business was established in 1832 by Whiton & Badger. They employ thirty-five hands, and do business to the amount of about $50,000 or $60,000 per year.

The Muzzy Iron Works, on Franklin street, were incorporated in 1867, with a capital of $100,000. The buildings occupied by them are of brick and of the following dimensions: — The first is three stories, 40 x 120 feet, and used as a machine shop; the second is a foundry, one story high, 40 x 86 feet; and the third three stories, 40 x 50 feet, used as a store house. They employ fifty-five hands in the manufacture of machinery of all kinds, and pay especial attention to lumber machinery. Their machinery is driven by an engine of thirty-five horse power, with a tubular boiler of thirty-five horse power, built by this company. The business was established in 1830 by Franklin Muzzy. Office on Central street.

A. C. Young occupies a three-story brick building, 20 x 100 feet, located No. 73 Broad street, for the manufacture of pumps and blocks. He employs three hands; commenced business in 1864. Power is furnished by an engine of eight horse power, built by the Muzzy Iron Works, with a tubular boiler of twelve horse power, built by Thomas Cunningham of Charlestown, Mass.

Philips, Archer & Co. occupy three rooms, 25 x 40 feet, in a brick block located No. 63 Exchange street, for the manufacture of brooms. Employ four hands, and turn out about 150 dozen per month. They commenced business in 1868.

Gilman, Tounsand & Co. occupy a store and shop, located Nos. 9 and 10 Granite Block, East Market Square; also a three story brick building, 25 x 40 feet, on Harlow street, for the manufacture of all kinds of furniture. Commenced business in 1867, and give employment to eleven hands.

E. H. & H. Rollins, manufacturers of all kinds of barrels, occupy three two-story wooden buildings, 50 x 80 feet, 25 x 150 feet, and 25 x 75 feet, respectively. They employ twenty hands, and have facilities for making 3,000 barrels per month. Their machinery is driven by an engine of thirty horse power, built by the Muzzy Iron Works, with a flue boiler of thirty horse power, built by Galigar & Holden of Boston, Mass.

D. K. Tuck occupies a two and a half story brick building, 40 x 60 feet, located No. 18 Central street, for the manufacture of castings of brass, bronze, and composition, and ship castings. Business established in 1867.

Benjamin Adams, manufacturer of first-class carriages and sleighs, occupies two two-story wooden buildings, 30 x 55 feet, and 28 x 40 feet, respectively; also a one-story wooden building, 20 x 40 feet, located on the corner of French and York streets. He employs twenty hands. The business was established in 1844.

J. O. B. Darling occupies a three-story brick building, 42 x 50 feet, located at Nos. 133 and 135 Exchange street, for the manufacture of moccasins and thick boots. He commenced business in 1838. Employs forty hands, and turns out about 600 pairs of moccasins per week, besides a large number of boots.

Michael Schwartz, occupies a two-story brick building, 25 x 45 feet, and a two-story wooden building, 25 x 100 feet, located No. 139 and 141 Exchange street, for the manufacture of saws. Commenced business in 1843. Employs nine hands and turns out about $20,000 worth per year. The machinery used in this business is driven by an engine of twenty horse power, built by Schwartz, Peavey & Co., with a tubular boiler 12 feet long by 4 feet diameter, built by Daniel Sullivan.

The Dirigo Saw Works, located at No. 84 Exchange street, were established in June, 1868, by Gibson, Kimball & Sanford. They manufacture circular, mill, gang, mulay, and cross-cut saws, made from Jessop & Son's steel. The great success that has attended this company has led them to increase their number of workmen, and to put in improved machinery, for the year 1869. The millmen of Maine have been in the habit of going out of the State to buy their saws. Hereafter they can be furnished by this company, who are nearer home, and who know what they want. Their saws are warranted to be perfectly true, and, if not found to be so, will be exchanged. The many saws made by this company since their commencement, and the general satisfaction they have given, argues much in their favor. They have an engine of fifteen horse power, and a tubular boiler of thirty horse power, both built by T. N. Egery.

Dexter Andrews occupies a three-story brick building, 18 x 40 feet, located at No. 3 Exchange street, for the manufacture of oars and sweeps. He occupies a three-story brick building, 18 x 40 feet. Employs four persons, and produces about 75,000 feet of oars per year, doing a business of $6,000 per annum. He commenced in 1853, and his goods are sent to all parts of the world. Many hundred vessels and boats that assist in freighting lumber down the river are owned here, the majority of which are furnished with oars and sweeps by Mr. Andrews. The facilities for obtaining suitable lumber, at reasonable prices, enable him to compete with many who are situated away from the lumber centre of the New World, and who labor under many disadvantages in consequence.

Bath, 9 miles from Brunswick, 39 from Portland, and 42 from Augusta, a city of about 9,000 inhabitants, on the Bath branch of the Portland & Kennebec railroad. It is pleasantly situated on the west side of the Kennebec river, and has great advantages for commerce. It was settled in 1756, and incorporated as a town in 1780. Ship building is carried on here to a large extent. The harbor is seldom obstructed by ice. In 1868 the valuation of real estate was $2,162,350; personal property, $4,440,650; total, $6,603,000. The rate of tax on each $100 is $1.95; number of voters, 1,100. The city contains seven churches, of which two are Methodist, one Episcopal, one Universalist, one Sweedenborgian, one Second Advent, and one Catholic; also contains six banks and two savings institutions.

Bath has three powers,—"Sewall's Mill," a tide power, fall thirteen feet, twenty horse-powers, will grind ten thousand bushels of grain, and saw 200,000 feet of lumber. One saw operates eight months. Two wheels, H. Blake's patent, thirty and thirty-six inches in diameter each.

"Rogers' Mill," a tide mill on Whiskeag stream, sixteen horse-powers, will saw 300,000 feet of lumber. One saw operates nine months yearly. Kendall wheel.

"Winnegance Mill Dam Company's privilege," a tide power, three hundred and thirty-three horse-powers, will saw 16,000,000 feet of lumber, operates nine months. Kendall wheel.

Two-thirds of the above power (Winnegance) is in Phipsburg; one third in Bath.

MANUFACTURERS.

Duncan & Davenport. Business established by them in 1849. They occupy three two-story buildings, two

DIRIGO SAW WORKS,

No. 84 Exchange St., Bangor, Me.

GIBSON, KIMBALL & SANFORD,

MANUFACTURERS OF

Circular, Mill, Gang, Mulay and Cross-cut

SAWS,

Particular Attention paid to Repairing all kinds of Saws.

[illegible]

"GIBSON, KIMBALL & SANFORD, Bangor, Maine."

[illegible]

DEXTER ANDREWS,

MANUFACTURER OF AND DEALER IN

Oars and Sweeps,

No. 3 Exchange Street,

BANGOR, ME.

N. B.—Constantly on hand, every variety of OARS, from six to twenty-five feet long. Sweeps made to order, at short notice.

GEORGE MOULTON & SON,

MANUFACTURERS OF

Steam Engines

AND

BOILERS,

Steering Wheels, Capstans and Water Tanks;

ALSO, MANUFACTURERS OF

MOULTON'S

PATENT SHIP'S PUMP,

Equal to Reedpath's Pumps of England.

Mill Work and Machine Jobbing

OF ALL KINDS DONE TO ORDER.

COMMERCIAL STREET, - - - BATH, ME.

[illegible]

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[illegible]

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ness of $10,000 per annum. An upright engine of seven horse-power drives their machinery.

William Ingalls, manufacturer of pumps and ships' blocks, commenced business in 1851, and has seven employees. He occupies a three-story brick building, 60 x 45 feet, located on Commercial street. An engine of eight horse power, built by Holmes & Robbins of Gardiner, Me., furnished with steam from a twelve horse power boiler, built by William A. Harris of Providence, R. I., supplies the power. Does a business of $20,000 per annum.

Crooker & Lilly occupy a frame building 65 x 44 feet, located on Commercial street, and manufacture anchors, capstans, windlass necks, etc., employing six persons. The business was established by David Crooker in 1840. This firm melt about nine tons of iron per week, and do business amounting to $20,000 per annum. Their machinery is driven by an engine of eight horse power, built by R. Dudgeon of New York.

A. L. Allen & Son commenced business in 1866. They occupy a four-story wooden building, 44 x 40 feet, situated on Commercial, corner of Arch street, and manufacture coffee and spices of every description, employing five hands, and running two sets of stones capable of grinding twenty pounds per minute. An engine of ten horse power, built by George Moulton & Son, with a flue boiler built by George M. Patten of this city, drives their machinery.

William Hogan occupies about 12,000 square feet of room, located at the foot of Commercial street, for the manufacture of hammered granite for buildings, cemeteries, etc. He commenced business in 1847, has ten employees, and does a business of $15,000.

Frank B. Torrey, manufacturer of composition rollers, bushing, and ship plumbing goods; also, brass founder and machinist. His buildings, consisting of office, finishing and pattern rooms, of brick, three stories, 30 x 40 feet, machine shop, 40 x 60 feet, one and one-half stories, also brick, and brass foundry, of wood, two stories, 20 x 30 feet, contain the necessary machinery for doing a first-class trade. At present, he employs twenty-five hands. His machinery is driven by a fifteen horse power engine.

S. R. Bailey, manufacturer of sleighs and carriages, occupies a two-story wooden building, 75 x 42 feet, located on Summer street. He commenced business in March, 1868, has twenty employees, and turns out about 200 sleighs per annum.

Belgrade, 68 miles from Portland and 70 from Bangor, a village and town, on the Maine Central railroad. In this town are parts of three large and beautiful ponds, or lakes, well stocked with fish, connected with each other, and find an outlet at Waterville. The scenery on the borders of these ponds is truly delightful. The town was incorporated in 1796.

Belgrade has three powers. First, at "Belgrade Mills;" the average height of fall is ten feet; one saw mill, one shingle machine, one grist mill, with three runs of stones, a corn cracker, etc., which have constant employment; also a factory for the manufacture of thread-spools and excelsior, which does a large amount of business, using annually 5,000 cords of birch and poplar wood.

This power is very inadequately employed, considering the great supply of water and excellence of the location, it being situated at the outlet of Great pond, which is about eight miles in length, and has an average width of two and a half miles, and is supplied by North, McGraw, and other ponds, besides numerous large and small streams. This power is situated six miles from the station.

Second, at the outlet of McGrath pond, at the present time undergoing improvement, there was erected, in the season of 1867, a building 40 x 50 feet, three stories high, intended for machinery of various descriptions: already in operation, saw mill, shingle machine, and saws for laths, pickets, etc., grist mill with two runs of stones, corn cracker, etc., with room and power for more mills during a portion of the season. Height of fall, ten feet.

Third, below the above powers, on the outlet of McGrath pond, was formerly occupied for a saw and shingle machine, is at present doing nothing, but with capital might add to their numbers and resources.

Bethel, 18 miles from Paris, 61 northwest from Portland, and 63 west from Augusta, a village and town on the Grand Trunk.—a fine farming town.—bounded on the north and west by Androscoggin river.—a town of 3,000 inhabitants, 30 schools, 375 voters, 5 churches; incorporated in 1796; valuation of real estate, about $800,000.

Bethel has six powers. Five are situated upon "Alder Stream," which is the outlet of ponds covering 1,200 to 1,500 acres, and has a descent of seventy feet in one-fourth of a mile.

The upper power is Walker's saw mill; height of fall twelve feet; works about five months in the year. With improved machinery, could operate all the year. Owned by C. C. Walker.

Russell's Bedstead and Furniture Mill; height of fall eleven feet; works all the year. Machinery not economical of power. Capable of turning out with best machinery 10,000 bedsteads per annum. Owned by L. & L. W. Russell.

Walker's grist and flour mill; height of fall fifteen feet; three runs of stones; works all the year. Very superior building. Machinery good, but not the best for economizing power. Would grind 75,000 bushels per annum with best wheel. Owned by C. C. Walker.

Shingle and threshing mill owned by Hosea Ripley; fall six feet. Machinery of poor construction. Would saw 2,400,000 shingles with suitable wheel.

Fifth power entirely unimproved; fall about six feet.

All the above powers are situated within three or four rods of the Grand Trunk Railway, which runs beside the stream for some distance. They are all perfectly safe against freshets or ice, the stream being fed almost wholly by ponds. The largest pond could be raised four feet or more for a reservoir, at little expense.

Sixth, Chapman Brook power: fall twenty feet.

Granite abundant.

The Bethel Steam Mill Co. occupy a mill, one mile from Bethel Station, for the manufacture of lumber.

Dunn & Tubbs occupy a wooden building, located on Main street, for the manufacture of doors, sashes, and blinds.

S. Robertson occupies a two-story wooden building, on Main street, for the manufacture of furniture. Commenced business in 1838; employs two hands; does business amounting to $1,500 per annum.

Pinckney Burnham occupies a two-story wooden building, 60 x 20 feet, another, 24 x 36 feet, two stories, blacksmith shop, 50 x 20 feet, for the manufacture of carriages and sleighs. Commenced business in 1837; employs 6 hands; turns out 40 carriages and 20 sleighs per year; also occupies a wooden building, 20 x 60 feet, two stories, for the manufacture of lumber, clapboards, and shingles. His machinery is driven by one centre vent and one overshot water-wheel. Does business amounting to $7,000 per annum.

CLOUGH & CO. occupy a two story wooden building, 60 x 28 feet, with ell, 20 x 30 feet; another, one story, 40 x 40 feet, located on Mill street, for the manufacture of [illegible]; they occupy buildings as follows: a three-story wooden building, 70 x 30 feet; dye-house, 20 x 16 feet; for the manufacture of woolen goods. Commenced business in 1867; employ 12 hands. Their machinery, consisting of 200 [illegible], 1 set of cards, 4 looms, and 2 sets of carding machines, are driven by 2 [illegible] wheels, 45 horse power. They consume 200 [illegible] of [illegible] per day, and 800 pounds of [illegible] wool per week, and turn out 1 bag of [illegible] and 100 yards of cloth per day.

D. F. BROWN & CO. occupy a three-story building, 40 x 38 feet, [illegible], 24 x 29 feet, [illegible] and bark house, 20 x 25 feet, for the tanning of leather. Commenced business in 1848; employ 4 hands. They tan 1,500 sides per year, and consume 150 cords of bark. Its business amounting to $7,000 per annum.

BIDDEFORD, 15 miles from Portland, 37 from Portsmouth, and 99 from Boston, a city on the Portland, Saco and Portsmouth railroad, and connected with Saco by a bridge. Biddeford is a city of about 12,000 inhabitants, situated on the southwest side of the Saco river, which separates it from Saco. It contains 11 churches, as follows: 2 Congregational, 2 Baptist, 1 Universalist, 1 Methodist and 1 Catholic. There are 35 schools including high, grammar, intermediate and primary, and the whole number of children attending school is 2,[illegible]. The valuation of real and personal estate in 1868 was $4,[illegible], and the number of polls 2,[illegible]. There are 2 banks here, the First National and the Five Cents Savings Bank. The principal business carried on is the manufacture of cotton goods and machinery.

BIDDEFORD AND SACO WATER POWER.—"Saco Falls Power," on the Saco river, four miles from its mouth, and at the head of tide. There are two falls; the upper eight feet; the lower thirty-two feet; about one-eighth of a mile apart. The river is divided at the lower falls into two channels,—the "main river" and the "east branch."

The ordinary low summer flow of water is from 250 to 300 cubic feet per second. Saco reports that the "volume of the stream is not susceptible of any considerable increase by artificial reservoirs or augmentation of the capacity of the lakes, except at great expense." The Great Ossipee pond could be converted into a reservoir of great capacity, more than twice the area of the lake at present, but for the cost of flowage. The proprietors of the land on the lake are not willing to sell at prices satisfactory to the water-power companies and the State of New Hampshire afford no remedy. A dam at Hiram Falls that would keep back an immense amount of water, but would flood extensive and valuable intervals in Brownfield, Fryeburg and Conway; accordingly, up to the present time nothing of these improvements has been carried out. Freshets increase the stream rapidly. Total range of water was [illegible] on the dam.

The power at strictly lowest run, reckoning from 250 cubic feet per second on a forty-foot fall, is (nearly) 1,200 gross or 900 net horse-power. If the volume specified be what can be commanded for each second of the whole twenty-four hours, the available power may be much greater than that above given, the water being held back by night and used by day. There is for nine months of the year a far greater amount of power than what is stated above; which may be made available by the use of steam power during the drought season. The returns from Biddeford set the power at "100,000 spindles," but give no details or information in support or explanation of the assertion. It certainly cannot be rated at 100,000 spindles for average work and at the low run of water. How much credit is due to the estimate cannot be determined, for the returns of Biddeford have no endorsement or signature.

Lay of the land good for building. Sites all occupied. Two beds of gravel within a mile.

The falls are a short distance only from railroads to Portland and Boston; and, as stated above, are at the head of tide, vessels drawing ten feet coming to the foot of the lower falls. River closed to navigation eight or nine months of the year.

On the Saco side upper fall is a gang saw mill cutting one 10,000 feet of lumber per twenty-four hours; single saw, 7,000; box machines making 800 [illegible] boards per day; [illegible] machines capable of turning out 200 pairs [illegible] hands daily.

MANUFACTURES.

SACO WATER POWER MACHINE SHOP. This company was incorporated in 1867, with a capital of $500,000. The main building occupied by them is four stories high, 30 x 300 feet; besides a one-story foundry building, 64 x 264 feet; a blacksmith shop, one story, 70 x 36 feet; a pattern house, three stories, 60 x 60 feet, and a number of outbuildings for storage of [illegible], offices, etc.,—the whole covering an area of three acres. They employ 500 hands in the manufacture of cotton and woolen machinery, of which they make about $800,000 worth per year. The machinery is run by a turbine water-wheel of 300 horse-power, built by Kilburn & Lincoln of Fall River, Mass., and by a Corliss Engine of 200 horse power, with two flue boilers of 150 horse power each, built by the Corliss Steam Engine Co., of Providence, R. I.

J. LORD occupies a three-story wooden building, 56 x 40 feet, and a [illegible] wooden building, 22 x 30, located corner of Alfred and Bacon streets, for the manufactory of carriages and sleighs. Commenced business in 1862, and gives employment to 12 hands.

S. NEWCOMB & CO. occupy two [illegible] wooden buildings, one of which is 22 x 70 feet, and the other 24 x 40 feet, located No. 11 South street, for the manufacture of ladies' and misses' boots and shoes. They commenced business in 1862; employ 60 hands; turn out about 150 pairs per day; and do business to the amount of $90,000 per year. Their machinery is run by an engine of 25 horse power, built by A. W. Tripp of [illegible], Mass.

M. M. MERRILL occupies a shop one story, 20 x 42 feet, located on Mary street, for the manufacture of ladies' and [illegible] boots and shoes. Commenced business in 1862, and gives employment to 9 men.

LITTLEFIELD & HOOPER, manufacturers of [illegible] [illegible], occupy one floor of a three-story wooden building, 40 x 40 feet, located No. 174 Main street; commenced business in 1866. They employ 8 hands; use 20 tons of [illegible], and turn out 10,000 [illegible] per year. The machinery which they use is driven by an engine of eight horse power, built by the American Machine Works of Springfield, Mass.

THE CHARLES LORD PICTURE MANUFACTURING CO. occupy one floor of a three story wooden building, 40 x 40 feet, located No. 177 Main street, for the manufacture of frame pictures of every description. They use about 20,000 pounds of [illegible] per year, turn out about 3,000 dozen pictures per annum, and give employment to 10 hands. Established in 1867. Office No. 171 Main street.

THE NEW YORK LOOM CORD CO. occupy three floors of a three-story wooden building, 40 x 60 feet, located No. 100 Main street, for the manufacture of [illegible] cords, and harness principally cotton, of which they turn out 25,000 per day, giving employment to 25 hands, and doing a busi-

ness of $50,000 per year. Their motive power is supplied by an engine of eight horse power, built by the American Machine Co. of Springfield, Mass., with a boiler of twenty horse power, built by the New England Steam & Gas Pipe Co. of Boston, Mass. This company was incorporated in 1867. Capital, $100,000. Ferguson Haines, Treasurer; T. L. Merrill, Agent.

THE PEIPERELL MANUFACTURING CO. was incorporated, Feb. 16th, 1844, with a capital of $1,000,000. Samuel Hooper is President; W. P. Haines, Treasurer, and F. Haines, Agent. The buildings occupied by them are as follows: a six-story brick mill, 75 x 222 feet, built in 1848; another of the same description and size, built in 1849, and one, 75 x 332 feet, six stories high, built in 1855. They run 80,000 spindles and 1,678 looms. The number of hands employed is 1,600. The kinds of goods manufactured are sheetings, shirtings, jeans, and drills, of which they turn out about 14,000,000 yards per year. Their motive power is furnished by 6 turbine wheels of 110 horse power each, and 16 breast wheels of about 21 horse power each, making a combined power of 1,000 horse.

L. BRODIGAN occupies a building, 35 x 16 feet, located on Gooch street, Gooch Island, for the manufacture and recutting of files of every description. Commenced business in 1864; has 6 employees.

RIDLON & BOND commenced business in 1867. Manufacturers of brass composition, German silver, castings, etc. Foundry situated in the rear of Gooch street, Gooch Island.

WILLIAM T. HORROBIN, manufacturer of Lee's Patent Antifriction Top Rolls and castings in general. Works covering about one acre of ground, located on Thornton street. Has 60 employees, consume about 12 tons of iron per month, run an engine of ten horse power, built by the Swamscot Machine Co.; also receive power from buildings adjacent.

BOWDOINHAM, 38 miles from Portland, and 62 from Skowhegan, a village in a town by the same name on the Portland & Kennebec Railroad, containing two churches and one bank. The town is located on the west side of the Kennebec river. Incorporated in 1762. The water power in this town is unimportant.

BROCK'S CROSSING, 41 miles from Portland, and 11 from Portsmouth, is located at the junction of the Portland, Saco & Portsmouth and the Portsmouth, Great Falls & Conway railroads; the latter running to Union Village, a distance of 26 miles.

BRUNSWICK, 30 miles from Portland, 141 miles from Boston, 184 miles from Providence, is a town of 5,200 inhabitants, on the Portland & Kennebec Railroad and Androscoggin Railroad, containing 9 churches, 3 of which are Baptist, 2 Free Will Baptist, 1 Congregational, 1 Methodist, 1 Episcopal, and 1 Unitarian. There are also 3 banks and one savings bank, 29 public schools, 1 medical, 1 scientific, and 1 college. Number of children attending the public schools, 1,329; number of voters, 1,122. The valuation of real estate is $802,068, and the valuation of personal estate is $5,212.68. Rate of tax, $2.10 on each $100. 11,520 acres of land. Population, 5,000. Bowdoin College is located here, and is divided into three departments,—literary, medical, and scientific. The college department has a library of 18,000 volumes; the medical department, about 5,000; and the literary societies, 12,000. The chapel is one of the finest buildings in America, and contains a fine collection of valuable paintings and a cabinet of minerals of rare collection and value. The medical school, in which pupils are taught the science of anatomy and physiology, the theory and practice of medicine, chemistry, etc., is a three-story brick structure, 96 x 50 feet. The number of scholars being about one hundred. The Androscoggin railroad runs from here to Farmington.

Brunswick has two powers. First, the "Pejepscot Falls," on the Androscoggin river, at the head of tide; total height of fall about forty-one (40.83) feet above common high tide; whole horizontal distance, 1,980 feet. "The fall can be increased to fifty-five feet by raising the upper dam, and the damage from flowage would be very slight, the land on both sides of the river for eight miles to Little River Village being mostly high."

The natural falls consist of coarse graphic granite and gneiss. The rock upon the middle fall projects above the water at several points, serving as natural abutments to the several sections of the dam. The lower fall has an island near the middle of the stream,—Shad Island. There are three pitches. The lowest has a vertical descent of about 15.49 feet; the middle, of 14.04; the upper, of 11.30.

In the survey of the privilege made in the year 1835 by Col. Loammi Baldwin, the run was estimated to be 4,425 cubic feet per second. This was doubtless correct for the time of measurement, but is greater than the *low water* run. The low water run at Lewiston is 1,566 cubic feet per second, this figure having been determined by numerous measurements and actual use for fifteen or more years. After making allowance for the contributions of the Little Androscoggin, Little river, and other smaller streams below Lewiston, it is impossible to conclude otherwise than that the river must have been considerably above its low run at the time of the estimate referred to, the only alternative being (and this is not admissible, the skill of the investigator being taken into account) that serious errors were made in the measurement. In corroboration of this view, the following facts are stated: The low water run at Augusta, on the Kennebec, is 130,000 cubic feet per minute, and the tributary area is about 5,000 square miles; whereas, the total territory contributing to the Androscoggin at Brunswick is somewhat less than 4,000 square miles; yet Baldwin's estimate makes the run at the latter point 265,500 cubic feet per minute. The low run at Saco is 15,000 to 18,000 cubic feet per minute, with about one-third the basin area of the Androscoggin at Brunswick. The low water run at Lowell, with nearly 5,000 square miles of tributary country, is 215,760 cubic feet per minute, all the great natural reservoirs of the Merrimac having been improved for storage purposes. The low water run at Brunswick will not probably be found to exceed, possibly not to equal, 120,000 cubic feet per minute.

Col. Baldwin's measurements were made in part upon the 12th, and in part upon the 14th of October, and during these two days the river fell off 2,000 cubic feet per second, as shown by his estimate. It is not impossible that it had been swollen by rain-fall in the upper part of its basin, and was in process of return to its ordinary low run volume at the time of the measurements. It is worthy of notice in this connection, that measurement of the Androscoggin was made at Lewiston during July, 1835, by the engineer of the company for which Col. Baldwin's explorations were made, and the figure arrived at for the volume was 6,887.29 cubic feet per second, which is over four times the *low water* run, as since found at that point, though it was probably correct at the time of measurement.

The above incidents show with what extreme care investigations of this sort have to be conducted, and with what precautions as to the stage of the river, to reach reliable and valuable results. Especially is it necessary, it may be added

SACO WATER-POWER MACHINE SHOP,

BIDDEFORD, MAINE,

MANUFACTURERS OF

COTTON MACHINERY

Of the Most Improved Patterns.

CARDS,

Cylinders, 36 x 36 and 36 x 30, with Nineteen Tops.

WELLMAN'S SELF-STRIPPER AND RAILWAY TROUGHS.

Finisher Railway Heads.

DRAWING FRAMES, ANY LENGTH,

With five lines of Steel Rollers, and Condensers between 2d and 3d Rollers.

ENGLISH SLUBBERS AND FLY-FRAMES,

With long or short Bolsters. Bobbins 12 x 6, 10 x 5, 9 x 4½, 7 x 3½ and 6 x 3.

RING SPINNING FRAMES,

2 —, 1⅞, 1½—, and 1¼ inch Rings.

SELF-ACTING MULES,

Sharp & Roberts', Higgins', Parr, Curtis & Mahler's Patents, 1 5-16 and 1¼ inch gauge; also Parr, Curtis & Mahler's Self-Acting Winding Mules.

SPOOLERS AND WARPERS,

Shafting, Castings, and Mill Work, of all kinds.

WILLIAM DWIGHT, *Treasurer.*
28 State Street, Boston.

JAMES H. McMULLAN, *Agent.*
Biddeford, Maine.

with reference to explorations had in view in this survey, to exercise precaution in making measurement of streams at points below manufacturing establishments, by which the flow of the water below is greatly modified, according as the mills are in operation or not, and the water therefore alternately freely delivered by day and ponded back by night. They further show how peculiarly necessary it is that streams be measured at the actual low stage, and thereat only with reference to reaching results of practical or the highest practical value. A shower of an hour's continuance on the basin of a stream of the character of the Saco or Androscoggin, taking place just before an exploration of its volume at a point below, might well nigh double the inferred working capacity of the river. Such measurements need to be many times repeated, at different times, and better if during different seasons of the year.

The amount of power corresponding to 4,425 cubic feet per second on a forty-foot fall, is 14,720 net horse power. We are not surprised, therefore, to read in Col. Baldwin's report that the power at Brunswick is sufficient to carry 135 mills as large as the Hamilton mill at Lowell. By this is meant of course the power as he found it at the time of measurement. If the low water run shall be found to be 2,000 feet per second, the power due to this will be about 8,528 gross or 6,800 net horse power, or 408,360 spindles; it being understood that the height of the dam shall be, as it now is, such as to give about forty-one feet fall, and the lakes at the source of the river continuing unimproved, as they now are, for storage purposes. A dam securing a fall fifty-five feet in height would give a gross power of 11,440 horse power, a net power of 9,130 horse power, or 547,800 spindles, and for nine months of the year a very much greater power.

The minimum power at this point, as at others above, is capable of very great increase, at least trebled, by the improvement of the great natural reservoirs upon the river. It is a power, at the lowest estimate that can be put upon it, of the first magnitude.

Lay of the land excellent for the location of mills and factories, there being a broad natural slope below the falls of sufficient extent to accommodate any required number of constructions. Colonel Baldwin judges the best sites to be upon the left bank. Advantages for the conveyance of water by canals, first-class. The stone in the immediate vicinity of the falls is suitable for foundations and such coarse work. Building granite of excellent quality within two miles, and excellent clay for bricks close at hand. Lime burned in town.

The privilege is owned by about fifteen different proprietors, resident in the vicinity.

There are two dams constructed of wood, leaky at present, as indeed they always have been. The upper or third dam rotted down and was carried away a few years ago. The power has been so much in surplus that the leakage has been of no importance. The machinery employed is by no means of the best construction for economising power or in other respects. This statement does not apply, however, to the cotton mill. This is located on the middle dam on the Brunswick side, a natural site for a mill of fifty thousand spindles being close by it on the same dam, and is the property of the Cabot Manufacturing Co. The company own thirty acres of land on the two sides of the river, and seventy-five tenements. There are also on the Brunswick side two flour mills and two saw mills. Upon the Topsham side are one flour mill and two saw mills. Various small machinery, in addition, is run upon both sides of the river. A very small proportion of the power is now used. It was formerly employed in manufacturing lumber, thirty saws being used; now only four single saws and a gang.

Vessels of one thousand tons can come within five miles of the falls, but from that point would be obliged to "lighter up," the channel being obstructed with shifting sands. The river is "frozen for four and a half to five months yearly." From the falls to Casco bay is three miles, the country a dead level; a railroad could be built at small expense, opening upon excellent harborage.

Second power, Quaker Mill pond, on the Androscoggin, three miles above the Pejepscot falls, will furnish power for a number of saws. It may in time serve a purpose of great importance as a reservoir against the *day drouths* at Brunswick, caused by the stoppage of the run at Lewiston by night in the low water season.

"Any parties who come amongst us with a view to the improvement of our water power, will meet a cordial reception and substantial co-operation from both sides of the river."

The Cabot Manufacturing Co., incorporated in 1857, capital $600,000, occupy one mill 300 x 45, four stories, and built of stone, with a wing 80x45, two wings 45x22 each, and a five story brick wing 90x45, where are manufactured fine sheetings 40, 44 and 48 inches wide, and coarse sheetings 36 inches in width. Employ 500 hands, consume 2,000 lbs. of cotton daily, turning out 90,000 yards of cloth per week 80x72, doing a business to the amount of $600,000. Run 550 looms and 27,000 spindles. Their power is furnished from two Lafell's and two Howd's water wheels, 600 horse power combined, the fall being fifteen feet. C. W. Freeland, president; Francis Cabot, Treasurer, and Benjamin Greene, Agent of the Company.

S. & E. Colby, manufacturers of doors, sashes, blinds, mouldings, &c., occupy two wooden buildings, one 3 stories, 50x25 feet, and the other 2 stories, 80x25 feet, located at Brunswick. They began business in 1853, and have ten employees. Their machinery, consisting of planing and moulding machines, lathes, saws, &c., are run by three Stearns water wheels, two of which are 3¼ feet in diameter and one 4 feet, the combined power being ninety horse, with a fall of twelve feet. The amount of business done annually is $12,000.

Bryant's Pond, about 42 miles west from Augusta, a village of three hundred inhabitants and two churches, on the Grand Trunk railroad, in the town of Woodstock. A part of this town is mountainous, but it contains large tracts of undulating fertile land. It is bespangled with beautiful ponds, forming mill streams, which pass to the Little Androscoggin river. Incorporated in 1815.

Whitman & Libby occupy a two-story wooden building, 25 x 55 feet, store-house, two stories, 40 x 21 feet, located on Main street, for the manufacture of carriages and sleighs. The business was commenced in 1861. Employ 6 hands, turn out 25 carriages and 30 sleighs per year, consume 6,000 feet of hard wood, and do a business of $4,000 per annum.

Burnham, 97 miles from Portland and 41 from Bangor, a village and town on the Maine Central Railroad. The soil is moderately productive. Burnham has three powers. First, on the Twenty-Five Mile stream, one-fourth of a mile from the Sebasticook river, in the northwesterly part of the town. The falls were formerly known as the Furgurson Falls, (not to be confounded with the Furguson Rips on the Sebasticook between Burnham and Clinton Gore,) and have a six-foot fall within the running distance of ten rods. No estimate of the power by measurement has been made. It works a tannery, grinding from 3,000 to 4,000 cords of bark, and tanning about 35,000

A. M. TRULL,

MANUFACTURER OF

"MONITOR," "TOP," AND COMMON BUGGIES,

Light Open Carriages, Express Wagons,

DOCTORS' CARRIAGES,

And a variety of Fine Carriages and Sleighs.

All work warranted to give perfect satisfaction.

BRYANT'S POND, MAINE.

sides of leather per year; two shingle machines, sawing from 400,000 to 500,000 shingles, running from eight to ten months; also a saw mill, sawing from 800,000 to 1,000,000 feet of lumber, running from four to six months.

The stream is fed by the Twenty-Five Mile pond, which is four by two miles in extent. No destruction by freshet. Total range from low to high water twelve feet. The rock about the falls is granite, suitable for building purposes. The land very convenient for shops and more mills. About half the basin of the stream covered with forest.

Second, situated in the southeasterly part of the town, on Bog brook, so called, has three feet fall in running distance of four rods; a saw mill, sawing from 200,000 to 400,000 feet of lumber, and a shingle machine, sawing from 200,000 to 300,000 shingles, using a Rose wheel. Works about four months in the year. Power could be greatly improved by buying flowage, so as not to let off the water in the summer.

Third, situated in the northerly part of the town, on the Meadow brook, so called; three feet fall in the running distance of six rods; shingle machine, sawing from 400,000 to 600,000 shingles, running from three to four months in the year.

There is one power at the "Ferguson Rips," on the Sebasticook river; ten feet fall in fifteen rods distance; one-half mile from the Maine Central railroad, one and one-half miles from the village of Burnham, in the town of Clinton Gore.

The Sebasticook being a river of considerable volume and fed by large ponds, the power upon it is regarded as of large value. No part of this privilege is employed.

At "Eel Weir Rips," on the Sebasticook river; fall eight feet in eighty rods; unimproved, and at "Thirty Mile Rips," on the same river; fall thirty-five feet in 480 rods. Velocity of current, one mile in thirty-two minutes.

Stream connected with numerous lakes and ponds, amongst them Newport pond, six by two miles, and Moose pond, eight by one miles. Total range of water, six feet; river very uniform in its volume.

BUXTON CENTRE, a country station on the Portland and Rochester Railroad, located in the town of Buxton. This town is bounded by the Saco river, which falls about eighty feet and produces a great hydraulic power. The town was incorporated in 1772, and the adjoining towns are Hollis and Dayton. The water-power of Buxton, taken in connection with the adjoining towns, is as follows:

Buxton has four powers. Bonny Eagle brook furnishes the most important water-powers in Buxton, exclusive of those on the Saco river. This brook is the outlet of Bonny Eagle pond. The volume of water at ordinary low water is nearly two square feet. The quantity for use might be considerably increased by a dam three or four feet in height at the outlet of the pond, which could be constructed at inconsiderable cost, and with little or no expense for additional flowage. The pond contains about one square mile of surface. Upon this brook are two falls, furnishing excellent sites for mills suited to the capacity of the stream.

First. "Bog Mills," so called, about one-half mile from the pond. The whole fall here is about fifteen feet in a running distance of six rods. At the head is a dam of stone about eleven feet high. This power is now improved by a grist mill, a shingle, lath and heading machine. It is situated one mile from West Buxton village, at Moderation falls, and about the same distance from Bonny Eagle village.

Second. Near the mouth of the brook, about one-half mile below Bog mill. Fall fifteen feet in a distance of three rods. This was formerly occupied for a chair and furniture factory, now unoccupied. Situated by the road about one-half mile below Bonny Eagle village and one mile above West Buxton village.

There are also some small powers on Little river, as follows:

Third. Near Buxton Centre two powers are now improved, viz: "Leavitt's Mills," occupied by a mill for grinding corn, and by machinery for sawing staves and for making shingles. Here is a stone dam ten feet high; whole head and fall about eleven feet. Water-wheel, Howd patent. At lowest run not sufficient power to operate.

Fourth. About fifty rods below is "Ward's Carriage Shop"; fall fourteen feet. Water-wheel, a "Tuttle centre vent." Not sufficient water to carry the machinery at lowest water.

CAPE ELIZABETH, 2 miles from Portland, a station on the Portland, Saco and Portsmouth Railroad, and contains one church.

THE PORTLAND KEROSENE OIL CO. occupy about four acres of ground, on which are twenty-one buildings, used in the manufacture of kerosene oil. This company was incorporated in 1859, capital $150,000, and manufacture naptha, paraffine and machine oil, etc. Have 130 employees. Refine 240,000 gallons crude oil per month, doing a business of $600,000 per annum. The machinery is driven by four engines of 100 horse-power combined, furnished with steam from eight flue boilers, eight feet long and four feet diameter. The engines were built by the following firms, viz.: one by Harrison Loring, of South Boston; one by C. Staples & Son, and the others two by the Portland Co. Wm. Atwood, Superintendent, and Francis McDonald, President of the Company. Office 194 Fore street, Portland, Me.

ATWOOD LEAD CO. Incorporated in 1865. Capital $80,000. Wm. Atwood, President; H. N. Jose, Treasurer, and James E. Fallon, Superintendent. This firm manufacture oil vitriol and chemicals generally, occupying a three-story frame building 150x66 feet, and a one-story frame building 80x30 feet, in which is manufactured red lead and litharge. Employ fifteen hands. Have a capacity for turning out one ton of lead per day. Run an engine of 10 horse power, built by the Portland Co. Steam furnished from a flue boiler of 40 horse power. Do a business of about $75,000 per annum. Office 194 Fore street, Portland, Me.

(For sketch of PORTLAND ROLLING MILLS, see Portland.)

CARMEL, 123¼ miles from Portland and 14¾ from Bangor, a village and town on the Maine Central Railroad. The town of Carmel borders on the Sowadabscook river, and is a very level tract of land, most of it of a very light and fertile soil, free of stone.

Near the streams are large tracts of intervale of great fertility and making very fine meadows. The main branch of the Sowadabscook river, which rises in Stetson, unites with Harvey stream and the Kingsley, both affording excellent mill sites, near the village of Carmel. Below these the Sowadabscook is deep and sluggish, from thirteen to twenty-five yards in width, flowing through extensive meadows. Near the east line of Carmel, this stream comes within about twenty rods of the Little Kenduskeag, and the two streams are united by a branch from twenty to thirty feet wide and three feet deep, called the Cross. The Kenduskeag is so rapid that it rises and falls much quicker than the Sowadabscook. When the streams are rising, the current in the Cross sets towards the Sowadabscook, and when falling, towards the Kenduskeag.

There are seventeen powers in this town. These are located as follows: Upon the Ruggles stream, three; Kingsley do., four; Sowadabscook do., four; Harvey do., four; Kenduskeag do., two.

There are no falls of any note; the power is produced chiefly by dams; is judged sufficient to cut yearly 5,000,000 feet of boards and 4,000,000 shingles. It is not all improved; in part as follows: Ten board mills, eight shingle mills, one lemon-box mill, one cloth-dressing and carding mill, and a grist mill. The mills do not work all the year; about one-half work six months, and the other half one-third of the year.

The Sowadabscook stream is connected with a pond about two miles long and one mile wide. The Kenduskeag stream is connected with a pond somewhat smaller. The capacity of the ponds could be very much increased at small expense by the erection of dams. Freshets moderately heavy. Total range from low to high water, five to ten feet. In ordinary seasons there is sufficient in the Sowadabscook throughout the year to operate nearly all the mills upon it.

"The effect of the improvement of the power upon the wealth and population of this place has not been favorable. There are several reasons for this. The two principal ones are, that the lumber was manufactured and marketed when it was low, consequently the surplus was small after paying expenses; and a large amount of lands were owned by non-residents, who stripped them of the lumber without leaving an equivalent. Notwithstanding the most valuable portion of the lumber is gone, still three-fourths of the town are covered with forests."

The value of the aggregate yearly products is $25,000.

Carmel contained in 1869, 23,040 acres of land and real estate to the value of $200,000. The number of polls is 308; the rate of taxation, .02. There is one church and two hotels.

CLINTON, 91¾ miles from Portland and 46½ from Bangor, a village and town on the Maine Central railroad, bounded on the east by the Kennebec river. The Sebasticook passes through the town on which is the village. Incorporated in 1795. Clinton contains, in 1869, 23,000 acres of land, and real estate to the value of $615,000. The number of polls are 425, and the rate of taxation two per cent. Population, 2,000. Has one hotel, called the Clinton House.

Clinton has three powers. First, "Hunter's Mills," in the southeast part of the town on the Sebasticook river. Height of dam seven feet; can be raised several feet more by paying small damages. Double saw mill, and mill with circular saw for long boards, two shingle mills, one grist mill with three runs of stones, a factory of sash, doors, and blinds, a carding and cloth-dressing mill, and a brush-block manufactory. About 3,800 inches of water are used. With a good dam there would be plenty of water for all the mills the year round. The river above is fed by large ponds, as Twelve-Mile pond, Newport pond, and others. In great freshets the water rises only about three and a half feet in the mill-pond. The underlying rock is slate; the dam and mills both rest upon solid ledge. Granite boulders that may be split for building purposes abundant within a half mile or mile. The land bordering the stream is but a few feet above the level of the water, in time of freshet, is level and very convenient for building.

Second, on the Black stream in the northeast part of the town; a grist mill and saw mill. Saw mill operates only about half of the year. Dam ten feet high.

Third, on the Twelve-mile stream; stone dam, about ten feet high; slate-ledge foundation; water about four months of the year.

The improvement of its power has had a most beneficial effect upon the wealth and population of the town, and in conjunction with the railroad has built up quite a village, with three churches, a school-house for two schools, that will accommodate two hundred scholars, nine stores, etc.

COBLE BRIDGE, a country station on the Grand Trunk Railroad.

CORRINNA, 118 miles from Portland, 34 from Bangor and 7 from Newport, a station on the Newport and Dexter Railroad, a branch of the Maine Central Railroad.

CUMBERLAND, (see also Westbrook,) 12 miles from Portland and 51 from Augusta, a station on the Portland & Kennebec and Grand Trunk railroads, in the town of Cumberland. This town was set off from North Yarmouth in 1821. It is situated on the Casco bay. The town has no water power of any consequence.

CURTIS CORNER, 31 miles from Lewiston and 65½ from Portland, a country station on the Androscoggin railroad.

DANVILLE JUNCTION, 28 miles from Portland, what was formerly the town of Danville. The Maine Central runs from here to Bangor, running their cars on the Grand Trunk track from here to Portland. This town was formerly called Pesyepsco, and was set off from the westerly part of the town of North Yarmouth in 1802 and added to Auburn in 1867. Auburn was made a city February 22, 1869.

DETROIT, about 108 miles from Portland, 30 from Bangor, a country station and town on the Maine Central Railroad.

Detroit has one power. The "Rips" on the Sebasticook river; height of the fall thirty to forty feet in one-fourth of a mile. Power estimated equal to sawing 8,000,000 or 10,000,000 lumber. Power only partially improved. The stream is fed by the Newport pond and the Martin stream from Plymouth. Rocks, granite and limestone, suitable for building. Total products, $100,000 or $150,000 per annum. The improvement of the power has resulted in a large increase of the wealth of the town.

F. Shaw & Bro. commenced business in 1848, for the manufacture of [illegible] leather. They have now a building 200 feet long, 40 feet wide, and are employing 20 hands, and produce about [illegible] sides per year.

Lamb & Willis commenced business in 1868, and manufacture boards, shingles, and laths. They occupy a saw mill, 25 x 60 feet, with a wing, 20 x [illegible] feet, used as a shingle and lath mill. Employ three hands, and produce about 200,000 feet of boards and [illegible] laths and shingles. Power furnished from a turbine wheel, under ten feet fall.

DEXTER, 125 miles from Portland, 41 from Bangor, 14 from Newport, a thriving village at the terminus of the Newport & Dexter railroad, a branch of the Maine Central. The town of Dexter was settled in 1801. The soil is very productive, and the inhabitants are all well-to-do farmers. In this town is a pond covering [illegible] acres, at the outlet of which is the village of Dexter. Dexter contains four churches, two hotels, one savings bank, and real estate to the amount of [illegible]. It also contains [illegible] inhabitants, [illegible] of whom are voters. The village of Dexter contains [illegible] inhabitants. Rate of taxation is two per cent. The town [illegible] square.

The town of Dexter has twenty-eight privileges. Sixteen of the above are situated upon the outlet stream of Dexter pond. Height of the falls 142 feet in three-fourths of a mile, or [illegible] feet in two miles. These are classed together as "Dexter Falls."

First, next below the outlet, J. & G. Abbott's woolen factory; head and fall eighteen feet.

Second, J. & G. Abbott's saw mill; head and fall eighteen feet.

Third, H. C. Parsons's carriage shop, occupied by J. C. [illegible]; head and fall nine feet.

Fourth, G. W. Curtis & Co., carpenters' and sash and blind shop; head and fall nine feet.

Fifth, George Bailey's carriage shop; head and fall nine feet.

Sixth, Nathaniel Dustin & Co., manufacturers of [illegible], ploughs, and machinery. Commenced business in 18[illegible]. The manufactory is [illegible] feet. They employ seven hands, and use water power, having a fall of eleven feet.

Seventh, [illegible] & [illegible] furniture factory; head and fall ten feet. Commenced business in 18[illegible]. They occupy two buildings on Main street. Their factory building is [illegible] feet, two stories, and the other, a store-house and office, is [illegible] feet, three stories. Employ three hands. Their power is furnished from a ten horse water-wheel.

Eighth, J. & G. Abbott's grist mill; head and fall twenty-two feet.

Ninth, Dexter Mills machine shop; head and fall sixteen feet.

Tenth, Dexter Mills woolen factory; head and fall twenty feet.

Eleventh, Dexter Tannery. In its present capacity, was established in the year 18[illegible], and is owned by Charles Shaw. It has 100 vats, and is used for the purpose of manufacturing sole leather. Employs about 20 men and works [illegible] hides per day, consumes some 2,500 cords of bark, costing from $7.00 to $7.50 per cord, and turns out [illegible] tons of leather per year, which is sold in the Boston market. It is run by water-power, having a fall of 10 feet.

Twelfth, Dexter Mills picker house; head and fall sixteen feet.

Thirteenth, Dexter Mills [illegible]; head and fall sixteen feet.

Fourteenth, Dexter Mills woolen factory; head and fall [illegible] feet.

Fifteenth, [illegible] factory, occupied by Reuben [illegible].

Sixteenth, [illegible] Hill's [illegible] factory, occupied by [illegible] Campbell.

As appears in the above statement, all the falls have some machinery upon them, but very much might be added. The amount of manufactures might be [illegible]. An excellent site for a cotton or woolen mill in place of the saw mill; also at the grist mill. The stream, or rather the pond, will furnish forty horse power under an eighteen-foot head all the year. The dam at the foot of the pond usually flows it about eight feet in spring. Area of the pond two to three and one-half square miles. No [illegible] water all kept back. Machinery mostly [illegible]. The best wheels are [illegible], [illegible], and Reynolds' turbine.

Seventeenth, on the same stream, just below its junction with Spencer's Pond stream, unoccupied; head and fall six feet.

Eighteenth, on the same stream, near the south line of the town; [illegible]'s saw and shingle mill; head and fall ten feet.

There are a number of privileges upon the [illegible] stream in the south part of the town. The stream is rapid and rather [illegible]. Will give twenty horse-power five months of the year. Never has been a [illegible] dam or much machinery upon it. Large quantities of hemlock, hard wood, and [illegible] in its bordering vicinity. On this stream are five privileges, as follows:

Nineteenth, [illegible]'s saw mill; fall ten feet.

Twentieth, below, unoccupied; fall eight feet.

Twenty-first, about a mile below; ten feet fall.

Twenty-second, somewhat south of the west line of the town, unoccupied; fall twelve feet.

Twenty-third, Charles [illegible]'s saw and shingle mill; fall ten feet.

Twenty-fourth, on a branch of the main stream, [illegible]'s shingle mill; fall twenty feet.

Twenty-fifth, at the outlet of Spencer's pond, saw mill and shingle mill; fall sixteen feet.

Twenty-sixth, a short distance below on the same stream, unoccupied; six feet fall.

Spencer's stream will furnish fifteen horse-power from five to seven months of the year. A good dam at the outlet of the pond. The [illegible] stream will furnish ten horse-power four months in the year. Two privileges on such stream unoccupied, as follows:

Twenty-seventh, unoccupied; ten feet fall.

Twenty-eighth, on a branch; twenty feet fall; formerly a saw mill upon it.

Abundant material on all the privileges, which in some cases need [illegible] building, [illegible] of the largest factory were built of it. The improvement of the power has doubled the population and trebled the wealth of the town.

Eldridge Brothers & Co., manufacturers of [illegible] [illegible], [illegible] [illegible]. The business was commenced in 18[illegible] by a part of the present firm. They occupy buildings of the following size: factory, [illegible] stories high, [illegible] feet; store-house [illegible] feet, two stories high. They employ six hands and do a business of $[illegible] per annum. The power is derived from a [illegible] Tyler wheel, made at West Lebanon, N. H.

Amos Abbott & Co., established 18[illegible], occupy a building three stories in height, [illegible] feet, for the manufacture of fancy cassimeres and flannels; employ [illegible] hands, and do business to the amount of $[illegible] per annum. Their motive power is supplied by a [illegible] Tyler water-wheel under eighteen feet fall. They also have a saw mill on the same privilege, that cuts [illegible] feet of lumber annually. A [illegible] Tyler wheel, with the same fall as above, runs the machinery.

DEXTER MILLS are located upon the eastern branch of the Sebasticook river. The business was first established in 1834. The present owners commenced operations in 1863, and do business under the style of the "Dexter Mills." Mill No. 1, built of stone and wood (two stories each), 262 x 44 feet, contains 10 sets cards, 21 jacks, 24 broad and 34 narrow Crompton looms. Power, one overshot wheel, 16 feet diameter, 15 feet long, 20 feet head and fall of water; and one double cylinder engine, 80 horse power, Pratt & Co., makers, Boston; boilers made by Swanscot Machine Co., South Newmarket, N. H.

Mill No. 2, built of wood, three stories, 120 x 40 feet, 5 sets cards, 11 jacks, 35 broad cam looms. Power, one breast wheel, 14 x 14 feet, 18 feet head and fall of water.

Mill No. 3, built of brick, three stories, 90 x 45 feet, 4 sets cards, 8 jacks, 36 broad cam looms. Power, one forty-five-inch Bodine's jonval turbine wheel, 16 feet head and fall of water.

The mills employ 300 hands, and use 800,000 pounds of wool per annum. The daily production is 750 yards 54-inch ladies' cloth, 1,200 yards 27-inch fancy and silk-mixed cassimeres, 1,000 yards 27-inch flannel. Total amount of production per year, in value, $600,000. The selling agents are Dale Brothers & Co., Boston, New York, and Philadelphia.

DRESDEN, 49 miles from Portland and 51 from Skowhegan, a flag-station in the town of Richmond, on the Kennebec river and on the Portland and Kennebec Railroad.

EAST LIVERMORE, 41 miles from Lewiston, and 75½ from Portland, a country station in the town of Livermore, on the Androscoggin Railroad.

EAST NEWPORT, 113¾ miles from Portland and 25½ from Bangor, a country station on the Maine Central Railroad.

EAST WILTON, (see also Wilton,) 58 miles from Lewiston, and 92½ from Portland, a country station in the town of Wilton, on the Androscoggin Railroad. It contains about one hundred inhabitants, two schools and one church.

MOOSE HEAD MILL. John Clark, Proprietor; Joseph Townsend, Agent. The business is manufacturing twilled flannels, and was established by Josiah Perham, late of Boston. The mill building is 70x40, three stories and basement, and is situated near Wilton Pond. The mill contains 3 sets cards, 1,100 spindles and 14 broad looms, driven by power furnished from a Blake wheel under fifteen feet fall. Employ twelve females, nineteen males, and produce about 235,000 yards ¾ goods per year.

HOLT'S SCYTHE MANUFACTORY, Hiram Holt, proprietor. This manufactory was established about 1850, by Calvin Keyes, and carried on by him until 1864, and had a capacity for turning out about 1,500 scythes per year. Mr. Holt then purchased the establishment, and immediately increased its capacity. The building is now 180 feet long and 30 feet wide, situated within 250 yards of the depot, and near the bank of the Androscoggin river, on which he has a fall, with a capacity of 80 horse power, but using only 40 horse, to drive the machinery now in use. He employs 25 hands, and turns out 100 dozen scythes, on an average, weekly. This establishment is in operation but eleven months in the year.

ELLIOTT, 45 miles from Portland, and 7 from Portsmouth, a country station and town on the Portland, Saco & Portsmouth Railroad. A good farming town. No water power.

EMPIRE ROAD, about 35 miles from Portland, a country station on the Grand Trunk, in the town of Poland.

ETNA, 119 miles from Portland and 19 from Bangor, a country station and town on the Maine Central Railroad; a fine farming town. It contains one Baptist church, 148 polls and four stores. Valuation of real estate, $140,000. Population, 900. The town is four miles wide by six miles long.

FARMINGTON, 63 miles from Lewiston and 97½ from Portland, an enterprising village in the town of Farmington, at the terminus of the Androscoggin Railroad. The town has a population of 2,000 inhabitants. The village has four churches, the Sandy River National Bank, capital stock $75,000, one female and one male Boarding School, a State Normal School and three town schools. It was incorporated in 1780. The town is watered by Sandy and Little Norridgewock rivers. At the union of these rivers are excellent mill privileges, and a delightful village, the soil of Farmington being of a superior quality.

Farmington has three powers, etc. First, on the Temple stream, so called, which unites with Sandy river near the centre village, upon which are a saw mill and grist mill; the former runs fall and spring, and the latter all the year round, or nearly so.

Second, situated on the Temple stream, about three miles above Walton's mills: a saw mill upon it.

Third, on the Fairbanks mill stream, so called, with a grist mill and saw mill upon it. The mills at this point usually lie idle a portion of the year for want of water.

Abundant and excellent rock, for building purposes, and an immense quarry of granite in the immediate vicinity of Farmington Falls.

Other small powers of no present importance.

NEAL & JACOBS occupy a two story wooden building 36x36 feet, another one and one-half story, 22x30 feet, located on Main street, for the manufacture of doors, sash and blinds. The business was commenced in 1865. Employ six hands. Their machinery is driven by a steam engine of 10 horse power, with one portable flue boiler built by T. W. Tifft, of Buffalo, N. Y. Do a business of $10,000 per annum.

FREEPORT, situated on the Portland and Kennebec Railroad, 22 miles from Portland, 133 from Boston and 78 from Skowhegan, contains two churches, five stores, but no manufacturers.

The town of Freeport has a small harbor at the head of Casco Bay. It was taken from North Yarmouth in 1789 and was formerly called Harraseeket Settlement, from the name of the river that passes through it.

Freeport has two powers. First, at the head of tide water on Harraseeket river; fall, forty feet; stone dam. This

power has been sufficient to run a grist mill with three runs of stones, and a saw mill with other machinery attached. The above mills have been destroyed by fire; privilege for sale.

Second, on the eastern branch of Royall's river; grist mill and saw mill; water sufficient to run a part of the year.

FALMOUTH, 6 miles north from Portland and 47 southwest from Augusta, on the Grand Trunk Railway. The town is watered by Presumpscot river. The soil on the whole coast of Maine is not as fertile as in the interior parts of the State, yet Falmouth comprises considerable quantity of good land. The town was incorporated in 1718, and included the territory of the city of Portland till 1786. Falmouth lies at the head of Casco bay.

Falmouth has four powers. First, "Presumpscot Falls," on the Presumpscot river, two and a quarter miles by the course of the river from Casco bay, being the lowest water-power upon the river. This privilege is owned by a corporation known as the Presumpscot Land and Water-Power Company. The corporation propose erecting a dam at the falls, 900 feet in length and twenty-two feet above mean low tide, and conducting the water from the pond thus formed, by canal, to a point in the "Lower harbor" of Portland, where thirty feet of water are found at mean low tide. The flats from the reservoir shortened to this point will be filled in, and [illegible] accommodation, the mills and factories be thus located, where ships can discharge, take and receive cargo directly from the buildings. The amount of fall for power purposes will vary from thirteen to twenty-two feet, according to the stage of the tide.

The canal is already considerably advanced toward completion, being one hundred feet wide at its base and narrower at points, and one hundred and thirty broad at its surface, and ten feet deep in the shallowest parts.

A hydraulic dock is contemplated, into which vessels with or without cargoes can be lifted by means of a lock 300 x 60 feet, and the dock being discharged at low tide if so required, the vessels be left high and dry upon a cradle for repairs and [illegible]. The dock will contain twenty-five acres. Other basins and reservoirs above this will be formed by the canal embankment, with an aggregate area of fifty acres.

The Grand Trunk railway runs by the side of the property. The main improvements will be within about a mile of the Victoria wharves in Portland harbor.

The water-power being that of the whole Presumpscot river will be to a remarkable extent characterized by uniformity, exemption from freshets and periods of low water.

Material for the best of bricks is afforded by the entire body of soil in the vicinity; granite (gneiss) is abundant and accessible, and building materials of all sorts can be dropped from the railway upon the premises of the corporation.

The corporation intend to build only a saw mill and several tenements, and let the power to supply privileges by sale or rent, and to leave to individual capitalists and corporations the work of erecting the required superstructures.

Second, the "Lower Falls," on the Presumpscot river; a good dam, a grist mill, and spoke-and-hub manufactory; the fall is fifteen feet in the distance of sixty feet. No amount of the power has ever been made by measurement. The owners of the mills say that they can work their machinery all the year round. Wheels, undershot. The stream is connected with Sebago pond, and is fed by strong springs. The freshets on this stream are quite heavy, but never cause any damage to the mills. The lay of the land for mills, etc., is good. Yearly products of the spoke-and-hub manufactory about $1,000.

Third, "Presumpscot Upper Falls," about one-fourth of a mile above the lower falls; fall, fourteen feet; a saw mill that cuts about 200,000 lumber per year, with water enough to run double that amount, and half the year water enough to run double the machinery they now have. Wheels, [illegible].

Fourth, a tide mill. No specifications.

GARDINER, 56 miles from Portland, 167 from Boston and [illegible] from Providence, a city of 6,000 inhabitants, at the head of large navigation on the west side of the Kennebec, and on the Portland and Kennebec Railroad; a city in 1849, incorporated as a town in 1803, and founded in 1760. It is considered one of the most flourishing towns in Maine in regard to its commercial, manufacturing and agricultural interests. It was named in honor of Dr. Sylvester Gardiner. The Cobbosseecontee stream enters the Kennebec here and furnishes a water-power of great usefulness and extent. The city contains seven churches, three National and one savings bank and two newspapers. Large amounts of lumber and ice are shipped from this port annually.

Gardiner has eight powers. All of these are situated in the city of Gardiner on the Cobbosseecontee river within one mile of its mouth (these), and taken together are called the Cobbosseecontee Falls. The total height of the falls is one hundred and twenty-seven feet above high tide; and one hundred and thirty-three feet above low tide in the Kennebec river.

The power of the whole fall, measured by a skilful hydraulic engineer, during the year ending July, 1869, being the year of the greatest drouth ever known in New England, and during October, the driest month of that year, is 1,200 horse.

All of the mills work throughout the greater portion of the year by day and by night. Upon the dams where all the power is used, a portion of the machinery is sometimes obliged to lie idle for two or three months.

About half of the power is employed.

The machinery is not of the most improved for economizing power. The Blake wheels are mostly used.

Six of the eight privileges, upon all of which are strong and tight stone dams, are owned by the heirs of the late Hon. R. H. Gardiner; one is owned by E. G. Richards, and one by S. D. Warren, of Boston, Mass.

The stream is connected with eighteen ponds, the largest of which has a surface of fourteen square miles of deep water, and the whole from twenty-five to thirty square miles. The capacity of the ponds can be increased greatly by the erection of dams and at slight expense, and increased by lowering the channels at the outlet. Three of the ponds have dams already built at their outlets. Artificial reservoirs are entirely feasible at moderate cost, and would vastly increase the power. The Cobbosseecontee and its tributaries drain two hundred and fifty square miles.

Owing to the extent of its reservoirs the stream is very [illegible] from freshets; the total range of water on the crest of [illegible] dams seldom exceeds two feet.

Stone and other building material abundant. Lay of the land about the falls excellent for the location of buildings. Sufficiency of land connected with each dam for all required building purposes.

Six of the eight dams, including land and privileges, are for sale; or a large amount of power to rent. Employers would assist in service required for the development of the power.

First power, reckoning from the foot of the falls; dam [illegible] feet; head 18.25 feet.

Second power, dam two feet, head 11.01 feet. Power about half employed.

Third power, dam three feet, head 19.01 feet. About half occupied.

Fourth power, dam four feet, head 16.18 feet, half occupied.

Fifth power, dam five feet, head 16.30 feet; wholly unoccupied.

Sixth power, dam six feet, head 16.69 feet.

Seventh power, dam seven feet, head 15.51 feet; fully occupied.

Eighth power, dam eight feet, head 13.38 feet; wholly unoccupied.

Total number of hands employed in the manufactures of Gardiner, four hundred and ten. Total annual product, two million dollars.

P. S. Robinson occupies one building 30 x 70, two stories, for the manufacture of doors, sash and blinds. He employs eight men. A 3½ feet Ladd wheel supplies the power.

One of the oldest manufacturers of shingle, clapboard, lathe and board machines in the State is Joseph Perry, who occupies one floor, 36 x 60. He commenced in 1838. Employs seven men. A 3½ feet Blake wheel supplies the power. The fall is 12 feet.

W. H. Moore occupies one floor, 36 x 60, for the manufacture of packing boxes, commencing in 1868. He employs six men.

P. C. Holmes & Co. occupy a main building, 40 x 106, two stories, used as a machine shop, a foundry 30 x 70, a store house 40 x 50, three stories, all brick, for the manufacture of machinery, commencing here in 1860, as successors to Holmes & Robbins, who established the business in 1831. They employ thirty men, and melt one ton of iron daily. A 11 horse power Blake wheel supplies the power; the fall is eleven feet.

Tucker & Co., proprietors Gardiner Woolen Mills, occupy a mill 41 x 100, three stories, brick, for the manufacture of cassimeres and flannels. Run two set of machinery. The business was established in 1842. The fall here is eleven feet. Part of the machinery in this mill is not running. They do mostly a custom business.

Atwood & Howland occupy one floor, 40 x 100 feet, for the manufacture of mill machinery and water wheels, commencing here in 1865. They employ six men and do a business of $10,000 per annum.

A. W. McCausland employs seven men, producing 2,000 broom handles daily. He also manufactures 100 dozen brooms per week. He commenced here in 1866, and does a business of $12,000 yearly.

Dingley Brothers occupy one room, 40 x 50, for the manufacture of carriage springs. Employ six men and do a business of $10,000 yearly.

J. L. Mitchell & Co. occupy one building, 40 x 60, three stories, for the manufacture of doors, sash and blinds, commencing here in 1860. They employ five men. A Blake wheel supplies the power. The fall is eight feet.

Copsecook Mill, S. D. Warren, 91 Milk street, Boston, proprietor, manufactures book and news paper. He runs nine engines and one 84 inch Fourdrinier machine; employs forty persons and produces two tons of paper daily. Seven Blake wheels supply the power; the fall is seventeen feet. H. E. Merriman, agent and superintendent. Mr. Warren also has mills at Manchester, N. H., and Cumberland Mills, Me.

Richards & Co. commenced the manufacture of printing paper many years ago. They run fifteen engines, two Fourdrinier 68 and 78 inch machines. Produce three and one-half tons of paper daily when there is a plenty of water. Eight Blake wheels supply the power; the fall here is sixteen feet. They consume 900 tons of coal, 1,700 tons of stock, 100 tons of bleaching powders, and 3,000 casks of lime annually.

Stanwood, Tower & Co. occupy one mill, 55 x 110, one story, for the manufacture of wrapping and hanging papers from wood, commencing here in 1866. They run seven engines and one cylinder machine, producing 3,000 pounds daily. The fall is sixteen feet. Four Blake wheels supply the power. Employ twelve persons. Salesroom 16 Blakestone street, Boston.

The largest and oldest carriage spring manufactory in this city, if not in the State is Wentworth & Brother, who occupy a building 75 x 30 feet. The business was established in 1851. They consume 75 tons of steel yearly and produce fifteen set per day, employing ten persons. A Blake wheel supplies the power. The fall here is fourteen feet. Their business amounts to $20,000 annually.

Johnson, Maxcy & Co. occupy a mill 40 x 70, three stories, for the manufacture of flour and meal. They have two run of stones, produce 25 barrels of flour daily and 60 bushels of meal. A 3½ feet Blake wheel supplies the power; the fall is ten feet.

H. Scribner, Jr., occupies one floor 40 x 80, for the manufacture of saw, clapboard, shingle, lath, box and board machinery, commencing here in 1866. He employs five persons and does a business of $12,000 annually.

E. Drake commenced the manufacture of clapboard, shingle and other machines in 1859. He employs three men and does a business of $10,000 yearly.

Aldrich & Waterhouse occupy one floor for the manufacture of axes, commencing here in 1868. They employ three persons, produce two dozen daily, and do a business of $7,000 annually.

J. E. Ladd & Co. occupy one floor, 40 x 80, for the manufacture of Ladd's Patent Turbine Water Wheel, and all kinds of saw mill machinery, commencing in 1866. They employ six persons, and do a business of $10,000 yearly. The favor with which their new wheel has been received has led them to make arrangements for a more extended business, anticipating their success in this direction. They claim more power and durability for less money than any wheel yet introduced. We expect they will do much towards developing the water power of Maine, which is yet in its infancy.

C. A. Robbins & Sons occupy a machine shop 40 x 45, two stories, foundry 34 x 40, one story, for the manufacture of machinery and castings, commencing here in the spring of 1869. A 6 horse power Huntoon engine supplies the power. The business has not progressed far enough yet to give any reliable information about it.

J. K. Foy employs three men for the manufacture of leather belting. He has a tannery here also, producing 200 ox hides per year. The tannery is to be enlarged and business increased.

Chas. Swift commenced the manufacture of jewelers' and druggists' boxes in 1858. He occupies one floor of a building 40 x 80, employing ten persons.

GILEAD, 71 miles west from Augusta and 25 S. S. W. from Paris, a station and town on the Grand Trunk railroad. The town is situated between two mountains, on both sides of the Androscoggin river. There is some good land on the river, but the chief part of the town is fit only for grazing. This town was settled in 1785. Contains 347 inhabitants, 77 of whom are voters, 10,000 acres of land, and property to the amount of

[illegible] Rate of taxation [illegible] per cent. It also contains two churches and [illegible]

Gilead has four powers. First, a grist mill on [illegible] brook; [illegible] Not now in operation.

Second, a saw mill on Chapman's brook; [illegible] a short time yearly. Not now in operation.

Third, a mill partially completed on a small stream; [illegible] of much value as a water-power privilege.

Fourth, a stream with abundant water but [illegible], called Wild river; dam after dam has been swept away by freshets, and a mill formerly upon it was carried off; it is now not used at all as a water power.

GORHAM, a station and town on the Portland and Rochester Railroad, [illegible] miles from Portland, has [illegible] and a population of [illegible]. The soil of the town is [illegible] quality.

Gorham has [illegible] powers, small. First, near the centre of the town, on Little river, "Davis Mill," [illegible] feet head, and about twenty horse-power. A saw mill, grist mill and [illegible]; [illegible] water-wheel; [illegible] falls are formed by a cut through the solid ledge. No lakes or ponds. [illegible]

Second, [illegible] below the Davis mill, "[illegible] Mill;" [illegible] feet head and about twenty horse-power; saw mill [illegible] all the year.

Third, "[illegible] mill," near the [illegible] part of the town, on [illegible] river; [illegible] feet head and twenty-five horse-power; [illegible] saw mill, grist mill, [illegible] mill and shingle mill. [illegible] wheel, [illegible] water. The power will run [illegible] all the year. Fall formed by a cut through the solid ledge. The stream is [illegible] with a small pond.

Fourth, "[illegible] Mill," in the [illegible] part of the town, on the [illegible] branch of Little river; [illegible] feet head and about twenty horse-power; saw mill, shingle mill, etc. The supply of water is small; mills run about [illegible] months of the year.

Fifth, one and a half miles below [illegible] mill, on the same stream, is "[illegible] mill," with [illegible] feet head and about twenty horse-power; unimproved; formerly a saw mill upon it. This privilege has a fall of [illegible] feet, and would run a saw mill the greater part of the year.

[illegible], in the [illegible] part of the town, on Little river, [illegible] a mill, but now entirely unimproved. Several other falls upon which formerly were mills of various kinds have long been unimproved.

The streams upon which these small powers are located are very variable in their volume. Spring freshets often cause them to overflow their banks, while in summer the supply of water is small. They are generally unconnected with lakes or ponds, and flow through [illegible] land. Artificial reservoirs could not well be constructed.

Gorham and Windham have [illegible] powers, all situated on the Presumpscot river, which forms the common boundary of Gorham and Windham.

First, "[illegible] Falls," one mile from the outlet of Sebago lake, [illegible] feet head. The power on the Gorham side is owned by [illegible] & [illegible], and is improved in part, the improvements consisting of one double saw mill, a [illegible] mill, and other machinery that is used in connection with saw mills. Windham side owned by the [illegible] heirs; unimproved.

Second, one mile below [illegible] falls, "[illegible] Falls," with [illegible] feet head. The power is owned on the Gorham

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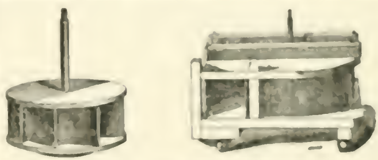

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side by [illegible], and improved in part with grist mill, [illegible] mill, saw mill, etc. Windham side is owned by Wm. H. [illegible] and Walter [illegible]; improved by Mr. [illegible] with [illegible] saw mills, [illegible] grist mill, box mill, etc.; by Mr. [illegible] with a [illegible].

Third, half a mile below [illegible] falls are "[illegible] Falls," with [illegible] feet head. The falls are unimproved, and owned on the Gorham side by [illegible] and others, and on Windham side by [illegible] W. [illegible] and J. [illegible].

Fourth, half a mile below "[illegible] Falls," "[illegible] Falls."

with ten feet head. This power is unimproved, and owned on Gorham side by Solomon Libby, and on Windham side by O. Haskell.

Fifth, nearly a mile below Island falls, "Dundee Falls," with eighteen feet head. The power is unimproved, and is owned on Gorham side by Solomon Libby, and on Windham side by Frank Mayberry.

Sixth, nearly a mile below Dundee falls, "Leavitt's Falls," with twelve feet head. This power is unimproved, and is owned entirely by the Oriental Powder Company.

Seventh, a mile below Leavitt's falls are "Gambo Falls," with sixteen feet head. This power is improved, in part, and owned entirely by the Oriental Powder Company. The improvements consist of the extensive powder works of this company.

Eighth, a mile below Gambo falls, "Little Falls," with seventeen feet head. This power is unimproved, and is owned by Watson Newhall.

Ninth, half a mile below Little falls are "Mallison Falls," with eighteen feet head. This power is owned on Gorham side by Stevens & Ray, and improved in part with a grist and saw mill. On Windham side the improvements consist of a woolen mill, and are owned by the Mallison Falls Manufacturing Company.

The head on the above falls is susceptible, in several cases, of being nearly or quite doubled. The horizontal or running distance in which the descents above specified are attained, varies in the different cases, from one-fourth to one mile.

No estimate, by measurement, has ever been made of any of these powers, other than a survey of the head at each fall, which was made several years ago. But a small part of the power at either falls is used. With scarcely an exception the mills work all the year. The machinery is not of the best construction for economizing power. At Harden's falls the centre-vent and spiral wheels are used; at Great falls the centre-vent and Kendall wheel; and at Gambo, thirteen water wheels are run, from tubs to turbines.

The river is the outlet of Sebago lake, Long pond, and nearly thirty smaller bodies of water, and numerous rivers. At the outlet of the pond is a dam, of fourteen feet head, capable of an increase of several feet. The head waters being so entirely under control, there are no freshets. The stream is almost entirely uniform throughout the year, varying from low to high water not over two feet. The outcropping and underlying rocks, about the falls, consist of blue flint, granite, mica schist, etc., and are regarded as very suitable for building purposes. The lay of the land, about the falls, is excellent for the location of mills, workshops, etc.

We have no means of knowing what proportion of the basin of the stream is covered with forests, but from the estimate of others judge it must be about one-third.

Of the nine powers here noticed, but four have any improvements upon them, and being nearly all used in the lumbering interests, the effects of the improvements of the power upon the wealth and population of the town have not been very marked. At Great falls a small village has been built up. At Gambo, the land, buildings, etc., for a considerable extent, are owned by the Oriental Powder Company. Their improvements have not tended very materially to influence the wealth or population in that place. At Little falls, formerly there were a cotton factory and saw mill. The former was burned down several years ago and has never been rebuilt. At these falls is a small village.

The nearest market is Portland, distant from the different falls from ten to fifteen miles; accessible by teams, or the Cumberland and Oxford canal, which, on the Gorham side, passes in close proximity to the falls.

JOHN L. CURTIS, manufacturer of custom carding. The mill, which is situated on Strout river, is three miles from Gorham, 80 x 18 feet, with ell 20 x 18 feet, has been built about twenty years. The main building contains an up-and-down cutting-off saw, and grist mill in upper story; on the next floor is a shingle mill, containing a circular saw. The power is furnished by one Tuttle wheel of 60 horse-power. He employs from three to seven men.

M. & T. P. IRISH commenced business in 1867. They occupy a two story building, 50 x 30 feet, for the manufacture of woolen ingrain carpets. Employ ten hands, run eight sets machinery, produce 15,000 yards, and do a business of from $8,000 to $10,000 per annum. Run a 5 horse-power engine, used principally for coloring purposes.

GREAT WORKS STATION, 25 miles from Union Village, and one mile from South Berwick, a flag station on the Portsmouth, Great Falls & Conway Railroad.

GREENE, 42 miles from Portland, and 96 from Bangor, a station and town on the Maine Central Railroad. The town of Greene has several ponds, but no good mill privilege. An excellent farming town. Incorporated in 1788.

This town has four powers. First, on Sabbattus stream, in the easterly part of the town, fifteen feet fall from top of dam to vent of wheels; two-thirds of the fall is secured by the dam.

Second, on Meadow brook, in the southwesterly part of the town, saw mill and shingle mill; operate fall and spring.

Third and fourth, on the outlet stream of Allen's pond, in the northwesterly part of the town. Neither of them is employed now, but they are more valuable than either of the others. There were, formerly, a grist mill, shingle mill and carding machine upon them. Water holds out the year round; fall twenty and twenty-five feet; excellent chance for dams. Estimated capacity of the Sabattus stream power, 50,000 bushels. Rose and Blake wheels used; will do the work of the old Tub and Flutter wheels with one-third, or one-fourth of the water. Improvements on the Sabbattus power, saw mills and a grist mill; former operate four months, latter, all the year. No damage from freshets; annual production, $7,000.

HALLOWELL, 61 miles from Portland, 172 from Boston and 215½ from Providence. A city delightfully situated on both sides of the Kennebec river,; the principal part being on the west side. The streets run parellel with the river and the ground ascends 200 ft. from the lower street or business part of the city. The varied views of the river, the neighboring towns and of a fertile country of hills and vales presented from the high grounds on each side of the city, form an exhibition of scenery of uncommon excellence. The town of Hallowell was incorporated in 1771. Vessels drawing 9 feet of water can come to the wharves in the centre of the place. This place has 7 churches, 3 national and 1 savings bank and 1 newspaper. Hallowell academy incorporated in 1791, is located here.

Hallowell, formerly, was the largest city, save Portland, in the State, was about 8 miles long by 7 wide, and contained the city of Augusta and a portion of the city of Gardiner, about two-thirds of the town of Manchester and the towns of Farmingdale and Chelsea.

Hallowell has nine powers, all situated on Vaughan stream, and are known as the "Vaughan Stream Falls." The total descent is 188 feet in about a third of a mile. No estimate of the power has ever been made with any degree of accuracy. On

one of the falls upon which there is an overshot wheel 20 feet in diameter, and a grist mill with three runs of stones grinding can be done eleven months of the year. Three only of the privileges are improved, using about 50 feet of the 188. Overshot and breast wheels employed, and no others. The power is owned by William Stickney and Samuel Pease. The stream is fed chiefly by springs and surface drainage, and is therefore variable in its volume. Artificial reservoirs of almost any desired magnitude could be constructed, and a vast amount of water kept in reserve.

Rock and granite, suitable for building purposes, in many respects the best variety quarried in this country, if not the world can be had.

Some twenty-five hands are employed in the mills the year through.

Market, Portland by rail, Boston by steamboats, four times a week; vessels drawing twelve feet can come within 100 yards of the privilege.

Allen Sampson & Sons, manufacturers of Floor Oil Cloths, occupy the following buildings respectively: No. 1 Sizing house, 2 stories, 100 x 21 feet, with a wing 80 x 30 feet and shed and box house attached. No. 2. Printing 100 x 40 feet, 4 stories. No. 3, used for painting, 110 x 37 feet, 2 stories. No. 4. Packing and drying house, 60 x 25 feet, 1 story. No. 5. Lumber house, 30 x 20 feet, 1 story. No. 6. Dry house, 30 x 24 feet, 2 stories. No. 7. Dry house, 40 x 30 feet, 3 stories. No. 8. Packing house, 112 x 30 feet, 1 story, and built of brick. No. 9. Box house, 30 x 18 feet, situated on Lincoln street. The business, which was commenced in 1846, gives employment to 30 persons, and produces 600,000 yards of oil cloth per annum, doing business of $250,000. Their machinery is driven by an engine of 25 horse power, built by I. F. & G. B. McCurdy, of this city, with two flue boilers, 26 feet in length and 4 feet diameter; one built by Allen & Endicott, of Cambridge, Mass., and the other by I. F. & G. B. McCurdy, which in addition to furnishing steam for the engine heat all the buildings. This firm have an office and salesroom at 58 and 60 Reade street, New York city.

Page, Wilson & Co. manufacturers of Floor Oil Cloths, occupy a three-story wooden building, 100 x 40 feet with a wing 30 x 24 feet used as a dry house; also a two-story wooden building 100 x 40 feet, used as a dry house and store house. The business, which was established some 20 years since, has been carried on by the present firm since about 1868, and gives employment to 20 persons, producing about 4,000 yards weekly, and doing business to the amount of $200,000 per annum. Their machinery is driven by a engine of six horse power, built by I. F. & G. B. McCurdy, of this city, with a tubular boiler, 15 horse power, which in addition to supplying the engine with steam, heat all the buildings.

I. F. & G. B. McCurdy occupy a two story wooden building 60 x 40 feet, as a machine shop, a blacksmiths' shop 60 x 30 feet; also a foundry 72 x 32 feet, and manufacture steam engines, boilers, shafting, mill work, &c. The business was established about 1844, by Isaiah McCurdy, and gives employment to 100 persons. Their machinery is driven by an overshot wheel of 20 feet diameter and 4 feet face.

The Hallowell Mfg. Co., incorporated in 1844 for the manufacture of sheetings and lawns, occupy a five story brick mill, 200 x 47 feet, with a picker house attached, 50 x 60 ft. three stories high; employ 200 persons. They run 4 pickers, 103 cards, 278 looms 11,500 spindles, driven by a double engine 200 horse power, Corliss pattern, built in Providence by the Corliss Steam Engine Co., and run by William A. Harris, of the same place. This mill produces 2,400,000 yards of cloth, consumes 1050 bales cotton annually. Henry J. Gardner, President; I. L. Shaw, Treasurer.

H. J. Gardiner & Co., of Boston and New York, Selling Agents.

Bodwell, Webster & Co. This firm commenced business in 1851, for the quarrying of granite. At the present time they are employing 140 men, working six quarries. These quarries are situated near the river and point of shipping, requiring from 20 to 30 yoke of oxen drawing the granite, which is of a light gray with a faint pinkish tinge. Of late years most of their productions have been used for the government in the forts, &c., but they are now introducing it into the market for building purposes, ornamental, monuments, &c.

Their facilities for getting out granite are unequalled in the State. They can work 1000 men to advantage, if required. The amount of business from 1862 to 1868, has averaged about $150,000 yearly.

Bodwell & Webster. In 1868 this firm commenced the quarrying and cutting granite. They employ from 80 to 100 hands. They have 16 yoke of oxen and 12 teams drawing stone from their quarries 2½ miles to shipping point. The quality of their granite is white and can be worked to any shape.

The business done will exceed $100,000 per year.

Hallowell Iron Foundry, manufactures castings, mill-logs &c. This foundry was established in 1836, and after changing hands, and being burned down, George Fuller, in 1865, bought the works and immediately erected a foundry building 40 x 60 feet, 1 story, with store house, blacksmiths' shop and shed, and commenced business under the style of Hallowell Iron Foundry, for the manufacture of box and cylinder stoves, fire frames, ash frames, caldrons, kettles, &c. &c., Employs seven hands, turning out 100 tons castings per annum.

In connection also is a wooden building for the manufacture of print blocks, paper machines, carpet rolls and various tools used by oil cloth manufacturers. This part of the business was established in 1846. The building is 40 x 80 feet, two stories, attic and basement. Have 12 employees, and consumes from 75,000 to 100,000 feet lumber per annum. A part of this building is used as a machine shop. The motive power is furnished from a Leffel double turbine wheel, under 17 feet fall.

Lyon Hunt & Son, tanners; established in 1857. They occupy two three-story buildings 60 x 25 and 75 x 30 feet respectively. They employ ten hands, manufacture sheepskin lining, and produce 400 hides daily. A water wheel of about twenty horse power is used to run the machinery.

HARDINGS, 4 miles from Bath and 5 from Brunswick, a flag station on the Bath branch of the Portland and Kennebec Railroad.

HARWOOD'S ROAD, 41 miles from Portland and 69 from Skowhegan, a flag station on the Portland and Kennebec Railroad, in the town of Bowdoinham.

HERMON POND, 125¼ miles from Portland and 10¼ from Bangor, a country station on the Maine Central Railroad.

HOTEL ROAD, 29 miles northwest from Portland, a country station on the Grand Trunk, in the town of Poland.

JAY BRIDGE, 48 miles from Lewiston and 82¼ from Portland, a country station in the town of Jay. This township was granted to David Phips, Esq., Jan. 11th, 1771; settled 1770; incorporated Jan. 4th, 1795; valuation of property in 1869, $92,124; valuation in 1868, $600,000; rate of taxation three cents and two mills on the dollar; number of polls, 319; number of voters, 425; churches, 4; libraries, 2; amount of population, 1,800; number of children attending school, 600; houses in town, 300; school houses 24.

KENDALL'S MILLS, 84 miles from Portland and 16 from Skowhegan, a manufacturing village at the junction of the Portland and Kennebec and Maine Central Railroads.

CLARK, CILLEY & CO. occupy a three story frame building, 60 x 40 feet, located on Water street, for the manufacture of pine furniture, broom and brush handles. The firm commenced in 1866; established by J. A. Cilley & Co., in 1864. Employ twelve hands, consume about 600,000 feet of lumber annually, doing business to the amount of $30,000. Power furnished from a 10 horse-power Blake wheel, owned by Woodman, Lawrence & Co.

WOODMAN, LAWRENCE & CO. commenced business in 1865, manufacturing doors, sash, window and door frames, blinds and boxes; works situated on Water street, in a two story frame building, 80 x 70. Employ fifteen hands. Power furnished from a 10 horse-power Blake wheel, the fall being eight feet.

EMERY, BRADBURY & CO. occupy two floors of a three story frame building, 50 x 45, situated on Water street, for the manufacture of chamber sets and furniture. Have ten employees. The power is furnished by Woodman, Lawrence & Co. This firm commenced business in 1868.

KENNEBUNK, 23 miles from Portland, 29 from Portsmouth, and 85 from Boston, a village and town on the Portland, Saco and Portsmouth Railroad, and on the Kennebunk river. It is regarded as one of the pleasantest towns in New England. The inhabitants are actively engaged in the freighting, coasting and fishing business. Ship building is carried on here to some extent. Amount of taxable property in 1868, $805,665; rate of taxation in 1868, 2 3-10 per cent; number of taxable polls in 1868, 585; number of children attending school, 949. Eight churches — one Unitarian, one Orthodox Congregationalist, one Advent, two Baptist, and three Methodist. Bank, Ocean National; capital $100,000. Public building, Town House, of brick, 70 x 42 feet, two stories in height, built in 1867. One hotel. There were built in 1868, five ships and one bark, with a total of 6,336 tons.

Kennebunk has seven powers. First, second and third, "Mousam Village falls," at the head of tide on Mousam river, two and a half miles from the sea. Divided into three pitches; total height of fall forty feet. The lower, to the foot of which the tide flows, has no dam. The second has a sash and blind factory, machine shop, saw mill, shingle machine, with circular saws. The upper has seventeen feet fall; two cotton mills and a grist mill.

Fourth, two miles above, on the same stream, "Lord's Cotton Mills," eight feet fall.

Fifth, one-half mile above, "Davis' Lumber Mill," nine to ten feet fall.

Sixth, one mile up, "Varney's Falls"; twelve feet fall.

Seventh, one mile further up, "Great Falls," forty-five feet, with a natural stone dam and some "twelve hundred horse-powers; one of the best powers in the State;" entirely idle; owned by Dana, Fitch & Thompson.

From Great falls to Mousam village falls, is 150 feet descent, the distance five miles. Stream very constant, being fed by many ponds, amongst them the Great Mousam pond, seven miles long; power could be increased one-fourth by the improvement of the ponds for reservoirs; total range of water from low to high, 3.5 feet. The falls are bounded all about with ledge; one-fourth of the basin covered with woods.

S. HEWITT & CO., manufacturers of yarns, twines, carpet warps, wicking, etc., commenced business in 1865. They occupy a three story wooden building, 40 x 52 feet, with an ell 25 x 36 feet, located on Main street. They employ thirty-five hands and use 175,000 pounds of cotton per year. Their machinery is run by a Union water wheel, 40 horse-power, built by Cole & Co., of Lake Village, N. H.

J. H. FERGUSON occupies a two story wooden building, 30 x 40 feet, with an ell 25 x 30 feet, and a two story wooden building 25 x 30 feet, for the manufacture of doors, sash and blinds. Commenced business in 1851, and employs eight hands.

R. W. LORD & CO., manufacturers of seine, patent laid, net and fancy twines and warp yarns, occupy a three story building, 35 x 64 feet, with an ell 24 x 25 feet, two stories, located on Mousam river. They commenced business in 1860, and have twenty-five employees, running 1,052 spinning, and 500 twister spindles, consuming annually 100,000 pounds of cotton. A 75 horse-power water wheel drives their machinery, the river fall being 9½ feet. Agents in Boston, H. & G. W. Lord, 89 Commercial street.

O. P. GRIFFIN & CO., established business in 1863. They occupy two buildings, viz.: main building 175 x 42 feet, three stories and attic; another 62 x 20 feet, two stories for the manufacture of cotton yarn, boot, shoe and corset lacings, skirt and cotton and worsted braids of all kinds. Employ one hundred hands, run 4,000 spindles and 800 braiding machines, and do a business of $200,000 per annum. Their machinery is driven by a 100 horse-power water wheel, under a fall of sixteen feet.

HEWETT & FASS established business in 1865. They occupy a three-story building for the manufacture of carpet warp, twine, wick, etc. Employ 40 hands, consume 450 bales cotton, and do a business of about $50,000 per annum. Their power is derived from a union water wheel of forty horse power, under a twelve foot fall.

KITTERY, 50½ miles from Portland and 1½ miles from Portsmouth, situated on the Piscataqua river, opposite Portsmouth, N. H., on the Portland, Saco and Portsmouth Railroad. This place is one of the earliest settlements in the State. It affords a convenient harbor for vessels usually employed in the coasting trade and fisheries. The Portsmouth Navy Yard is situated here.

LEEDS, 45¼ miles from Portland, and 92¾ from Bangor, a station and town on the Maine Central Railroad. This town is large and flourishing and finely watered by a large and beautiful pond. Agriculture is the chief business of the inhabitants. The village is neat and pleasant, the soil is fertile and productive. Incorporated 1802.

There are eight powers in this town. First, on Coleman's Mill stream; grist mills, by former years used also for saw mills.

Second, fifty rods below; shingle machine, etc.

Third, on Coffin's Mill stream; saw and shingle mills.

Fourth, on Bridgham's stream, [illegible]; formerly grist mill and carding mill. A considerable pond connected.

Fifth, on Mason brook, not used, formerly a grist mill.

Sixth, on a small stream in the north part of the town; a shingle mill.

Seventh, not used, in northwest part of the town; operates a shingle mill.

Eighth, a small but good power in [illegible] part of the town; formerly a saw mill. Not used.

The Androscoggin pond, in the southwest part of Leeds, is connected with the Androscoggin river by Dead stream, and the pond lying upon the same level as the river, the waters flow in and out according to the stage of the river.

The water powers, though not large, are susceptible of much more use than is now made of them.

The Androscoggin river forms the dividing line between Leeds and Turner for about eight miles. At North Turner bridge, sixteen miles above Lewiston, there is a fall of about six feet. [illegible] feet according to another statement.

LEEDS CENTRE, 33½ miles from Lewiston and 68 from Portland, a country station on the Androscoggin Railroad.

LEEDS CROSSING, 26 miles from Lewiston and 60½ from Portland, a country station. The Maine Central crosses here.

LEWISTON, 33 miles from Portland; 102½ from Bangor, 32 from Augusta, 270 from Montreal, 316 from Quebec, [illegible] from Toronto, [illegible] from Detroit, 1,121 from Chicago, 1,488 from St. Louis, 140 from Boston, 188 from Providence, 370 from New York and [illegible] from Washington.

The territory now embraced in the corporate limits of the city of Lewiston, was a part of what was known as the Pejepscot claim, held by virtue of an Indian deed, called the Warumbo deed.

In the early part of 1770, Paul Hildreth, originally from Dracut, Massachusetts, came with his family from New Gloucester and built a cabin on the east bank of the river, a little below where the old [illegible] Road bridge now stands, and nearly opposite the mouth of the little Androscoggin river. Hildreth was the first white settler in what is now called Lewiston. In the fall of the same year (1770), Lawrence Jackson Harris came from Dracut, Mass., and put up the frame of a saw mill for Messrs. Little & Bagley, the land proprietors under the Pejepscot purchase. The mill was built on the lower part of the falls, near where the grist mill building now stands. There was no dam built across the river, but the water to run the mill was taken from the falls by a sort of side dam or sluice way. Several wooden dams have since been built across the stream and as often been carried away by freshets. The present permanent granite dam will, without the least doubt, last as long as [illegible] and nothing short of an earthquake can move it from the primitive rock on which it is securely fastened. Some time during the year 1770, Hildreth's cabin was burned and he removed with his family to New Gloucester, but in the spring of 1771, he, with Mr. David Pettengill, came back to Lewiston and they both built log cabins near where Hildreth first settled. That year (1771) Lawrence J. Harris brought his family here, and also came to finish the saw mill, the frame of which had been put up the previous year. The mill was put in operation the same season and sawed boards for the use of the settlers. Previous to this there were no boundary mill nearer than North Yarmouth, or New Gloucester, and no cleared roads to either place.

The route by which Mr. Harris came from Dracut to Lewiston, was by [illegible] from the Merrimac river to Portsmouth, N. H., thence by coast to Freeport, thence by spotted trees from Freeport to Brunswick [illegible], (landing the boats which he had built at Dracut on land for [illegible],) thence up the Androscoggin river to Lewiston Falls.

By this route and in this manner he brought his household goods and family, spending with them their first night in Lewiston beneath the spreading branches of a large oak tree which stood by the road in front of where the Lewiston Falls Manufacturing Company's office is now located. Mr. Harris was the grandfather of Colonel William Garcelon, to whom we are greatly indebted for many incidents of our early history. In 1775, Amos Davis, assisted by David Pettengill, surveyed a part of the plantation, and ran out the lots around the falls for the proprietors Little & Bagley. It was found that the lot on which Hildreth had located was lot No. 82, and Pettengill's lot, No. 19. Mr. Harris' lot was not numbered, but [illegible] the mill lot, extending from the Hildreth lot, No. 82 up river to the Continental Mills, along the bank of the river, around and above the falls, to the corner of lot No. 70, (afterwards called the Col. John Nash lot, near the new Stone Mill.) thence southwest on line of lot No. 71, to lot No. 26, (Amos Davis' lot,) near College street, thence southwest on lot [illegible] and [illegible] and 82, to the Androscoggin river, nearly three hundred rods.

This lot was held and owned by L. J. Harris until his death in 1784. In the settlement of the estate the mill privilege and about fifteen acres of the land around the falls was sold back to Josiah Little, of Newbury. Amos Harris, son of Lawrence J., inherited his father's estate and continued to own the remainder of the farm on the falls, as well as lot No. 83, (the Haley estate) until 1810, when he sold both lots to Dan and Leonard Read for $3,000, and afterwards removed with his family to Ohio.

This Harris property was afterwards purchased of the Reads by Col. Josiah Little, who lost one of his arms while blasting rocks on the rapids, near the Catholic cemetery. The object of the blasting was to improve the navigation of the Androscoggin river, so as to run rafts of lumber more safely over such rapids. Think of this, and the trip of Lawrence J. Harris from Dracut to Lewiston in 1770, in view of 1863 complaints of a [illegible] delay of an express train from Lewiston to Lowell.

The most of this Harris property, which embraces the larger portion of the mill sites in Lewiston, remained in the possession of the Little family, until about the year 1836, when the proprietors of the water power (mainly the Little heirs) obtained an act of incorporation for the great Androscoggin Mill Dam, Locks & Canal Co. This company did not make many improvements, and in 1847 sold out to the Lewiston Water Power Co., who subsequently sold their interest to the Franklin Co., who now own and control the water power of the Androscoggin river at Lewiston. The first saw mill was burned about the year 1781, but was soon afterwards rebuilt by Mr. Little. The second and third mills were also burned, apparently by the malice of the [illegible].

In a letter to Amos Davis, written in March, 1815, Mr. Little writes thus:—

"My son Michael writes that the people of Lewiston and Minot are desirous to have a grist mill and saw mill built

this season on the falls, and that the people would get in the timber that will be suitable for them, provided I will consent to put them up this season. If the people think the mills will be safe from the base incendiary, who has no more regard for one man than another, I will, with the assistance of the people, make one more trial to rebuild them. But I should like to have the timber cut on the old of he moon, that if it should be preserved from fire, it might be more durable."

A grist mill and a saw mill were afterwards built and did good service until comparatively a late period. Edward Little, Esq., who lived and died in Danville, was the son of Josiah Little of Newbury, and inherited most of his father's property about Lewiston.

Previous to 1845, the manufacture of cotton yarn was began on a small scale in a little wooden building near the grist mill. Subsequent, a few looms were introduced, and cotton cloth manufactured.

This was the first cotton mill in Lewiston. It was destroyed by fire, about the year 1848 or 49.

The Messrs. Little in 1819, built a small mill where the old wooden woolen mill now stands, which was used for a carding and fulling mill. This building was also destroyed by fire in 1829. Previous to 1798, a saw mill was built at what is now called Barker's Mills, by either Mr. Jacob Barker, or his son Cyrus, who is still remembered by older citizens. A grist mill was afterwards erected by the Barkers, and the property remained in the family until sold to Messrs. Read, Small and Frye. For several years past the mills and privileges have been owned by John N. Small, Esq., who has recently sold the same to J. B. Ham, John Goss and J. S. P. Ham, who are associated together in the corn, flour and meal business, under the firm name and style of J. B. Ham & Co.

There are eight churches, two hotels, one National and one Savings Bank, 2,244 polls. Valuation of real estate $5,022,480; rate of taxation from 2½ to 3 per cent. The whole territory of the city is equal to six miles square. Population about 13,000. There are 37 school houses and 38 schools.

Lewiston has three powers. First, "Lewiston Falls," on the Androscoggin river, twenty miles above its junction with the Kennebec, and forty miles by the river from the ocean. Formed by a ledge of gneiss and mica schist, crossing the river diagonally, which is so extended as to form the bottom and sides of the stream both above and below the falls, and which projects above the level of the water in several small rocky islets, that serve as abutments to the dams.

Of the *natural* fall, thirty-eight feet, which with dams of an average height of about twelve feet, produces an available power of fully fifty feet head. This descent is attained in a horizontal distance of 600 feet.

Volume at lowest water, 94,000 cubic feet per minute. Volume now used, 58,000 cubic feet. By the improvement of the Umbagog and other adjacent lakes, the available volume at the lowest summer run could be increased to at least 150,000 cubic feet per minute.

At the lowest run of water, 6,666 horse-powers, or sufficient to drive cotton mills containing 400,000 spindles. Of this, 2,500 horse-powers, or 150,000 spindles, remain unappropriated. As above implied, the power can be largely increased by the improvement of one chain of the principal lakes. The power is perfectly secure against all possible contingencies of ice or floods. The total range from the highest to the lowest water is about eight feet on the dams.

The above calculation is based on eleven hours per day, working time, for six days each week, and what is meant is, that there are 372,240,000 cubic feet of water passing this place, which can be held back during nights and Sundays, so as to be all used in the six working days of eleven hours each.

The lay of the land is exceedingly favorable for the location of manufacturing establishments, there being two natural levels on the margin of the river, the lower allowing twenty-two feet fall, the upper twenty-eight feet; and there being also abundant room for factories employing the whole power. The levels are sufficiently distant from the river and from each other to afford ample space for the largest establishments, with their yard room, boarding-houses, etc.

The territory removed from the river is favorably disposed for the location of streets and building lots, and for the growth of a large city. Seven acres have been elegantly laid out as a public square.

Firm foundations for the large mills are easily obtained at trifling cost. Bricks of the best quality are made close at hand. Stone is procurable in unlimited quantities. Lumber is supplied by the country above and adjacent. The surrounding native population of farmers furnishes the operatives for the greater part.

Lewiston is connected with the seaboard by two lines of railway, and is within six and a half hours of Boston, one and a half of Portland, and one hour and a quarter of Bath. Cotton can be brought to its warehouses, from Mobile or New Orleans, as cheaply as to Lowell or Lawrence; and transportation of either raw material or manufactured goods can be effected at as little cost, as to or from any other of the large interior manufacturing towns of the country.

The improvements are four dams, eight hundred and fifty feet in aggregate length. Guard locks, with seven sluiceways, 9 x 12 feet; main canal 64 feet in average breadth in the clear, and designed for twelve feet depth of water. Cross canal forty feet broad in the clear, ten feet of water. The dams and guard locks are constructed of split granite, in the most solid and substantial manner.

The power is owned by the Franklin Company. Office at Lewiston; agent, A. D. Lockwood.

MANUFACTURERS.

The various manufacturing companies are as follows:

Bates Manufacturing Co. Incorporated 1850. Commenced operations 1852. Capital stock, $1,000,000. Two cotton mills, 40,000 spindles; one woolen mill, 8 sets machinery; females employed, 900, males 400; horse-power, 800; water-wheels, 6 turbines; buildings, brick; goods manufactured, cotton and woolen. Production, 5,707,372 yards cotton cloth and 226,155 yards woolen cloth per year.

Hill Manufacturing Co., Josiah G. Coburn, Agent. Incorporated 1850. Commenced operations 1854. Capital stock, $700,000. Two mills; spindles, 52,400; females employed, 600, males, 200; horse-power, 800; water-wheels, 4 turbines; buildings, brick; goods manufactured, cotton. Production, 7,037,353 yards per year.

Androscoggin Mills, Amos D. Lockwood, Agent. Incorporated 1860. Commenced operations 1860. Capital stock, $1,000,000. Two mills; spindles 50,000; females employed, 825, males, 375; horse-power, 800; water-wheels, 5 turbines; buildings, brick; goods manufactured, cotton. Production: 6,500,000 yards cloth, 1,800,000 grain bags, and 1,800,000 pounds bags per year.

Continental Mills, Stephen I. Abbott, Agent. Incorporated 1865. Commenced operations 1864. Capital stock, $900,000. Occupy a brick mill 212x75 feet, with ells 40x60 and 40x80 feet; 27,360 spindles and 600 looms; employ 475 females; horse-power, 440; water-wheels, 3 turbines. Production, 112,000 yards per week, or 5,6000,000 yards per year.

Franklin Company, A. D. Lockwood, Agent. Incorporated 1854. Commenced operations 1857. Capital $600,000. This company owns the water power, canals and the adjoining land around the falls on both sides of the river, also several hundred acres of land in and around the more

thickly settled portion of the city. They also own the following property, viz: Lincoln Mill, J. K. Piper, Agent, Commenced in 1846. One mill; spindles, 20,000; females employed, 400; males, 60; wheels, 2 turbines; dwellings, brick; goods manufactured, sheets. Production, 2,800,000 yards per year.

C. Witherspoon & Co. occupy one floor of a three story wooden building, 70x80 feet, located on Main street, for the manufacture of mill brushes. Commenced business in 1869; employ ten hands; turn out from $4,000 to $6,000 worth of brushes per year.

Lewiston Falls Manufacturing Co., located on Mill street, for the manufacture of sweaters, repellants, &c., occupy a brick mill, three stories, 70x40 feet, and a wooden mill, three stories, 82x40 feet; dye house 25x30 feet; wool house 20x40 feet. Commenced business in 1854. Capital, $600,000. Employ forty males and fifty females; use six sets of machinery, which are driven by two water wheels. They consume 225,000 pounds of wool and turn out 250,000 yards of cloth per year. The wooden mill was built in 1866, and the brick mill in 1870.

L. F. Wheeler is located at No. 10 Main street, for the manufacture of machinery. Occupies a building two stories, 20x60 feet. Commenced business in 1868. Employs seven hands. His machinery is driven by a steam engine of eight horse power, with cylindular boiler; does business amounting to $30,000 per annum.

J. J. H. Cobb & Co. occupy a brick mill three stories, 50x72 feet, dye and boiler house 30x60 feet, on Lincoln street, for the manufacture of repellants and all kinds of woolen goods. Incorporated in 1868. Capital, $60,000. Employ seventy-five hands. They consume 300 pounds of wool per day, and produce 400 yards of cloth. Machinery is driven by one leffel turbine water wheel, fifty horse power. Have two tubular boilers, seventy-five horse power, built by Thomas Cunningham at Charlestown. Do business amounting to $200,000 per annum.

Lewiston Mills, for the manufacture of ticking, denims, shirting stripes, gingham, sateenes, jeans, etc., was incorporated in 1861. Capital, $600,000. Employ 700 hands. Machinery consists of 432 looms, 17,880 spindles, driven by three turbine 6 foot water wheels, which have eighteen feet head fall. They consume 40,000 pounds of cotton, 250,000 pounds of yarn, and produce 300,000 pounds of cloth per week. Have four boilers for heating the mill, built by J. J. Walworth & Co., of Boston, Mass., and do business amounting to $800,000 per annum.

L. W. Gilman & Co., manufacturers of bobbins and spools, occupy a two story wooden building, 70x20 feet, with three store houses, one 20x30 feet, one 40x30 feet, another 18x20 feet, located on Cross Canal, where they employ eighteen hands. Commenced business in 1868; turn out 1,000,000 spools and bobbins, and do business amounting to $80,000 per annum.

Androscoggin Mills, for the manufacture of ladies' dress goods, cassimeres, tweeds, and Balmoral skirts. Commenced business in 1861; employ forty-three hands; run 1007 suits of machinery.

D. F. Noyes occupies a three story brick building, 74x90 feet, located on Mill street, for the manufacture of leather belting and card clothing. Commenced business in 1865; employs twelve hands. Machinery is driven by one turbine water wheel, 15 horse power, and one steam engine, 15 horse-power, built in Hartford, Conn., with one Hartford boiler, 20 horse-power. His consumes 12,000 skins of leather per year, and 180 pounds of wool wire per day for card clothing, and turns out 400 to 500 feet of belting per month, and 120 feet of card clothing per day, and does business amounting to $30,000 per annum.

S. R. Bearce & Co. occupy the Franklin saw mill and a large dressing mill, for the manufacture of leather. They employ one hundred hands in the busy season, and turn out 17,000,000 feet of lumber per year.

Lewiston Machine Co. occupy eight buildings, as follows: machine shop, 200x40 feet, two stories; foundry, 102x80 feet, two stories; blacksmith's shop, 40x40 feet, 14 feet steel; pickering and dressing shop, 100x40 feet, one story; pattern house, 30x40 feet, three stories; painting shop and store house, 30x60 feet, two stories; engine and boiler house, 40x30 feet, one story; dry house, 40x14 feet, 14 feet steel, and boiler house, 70x20 feet, one story. The business was established in 1861. S. T. Allen, President; John W. Donohoe, Treasurer, and E. H. Cummings, Agent. This company manufacture steam and water machinery, shafting, etc., employing 100 hands and doing a business of $200,000 per annum. Their shops contain 75 machines, such as lathes, drills, screw machines, wood working machinery, etc., driven by a 30 horse-power engine, built by Corliss Steam Engine Co., of Providence, R. I.; boilers by Portland Co., Portland, Me. In their foundry they have a McKenzie cupola and blower, with a capacity for melting three tons iron per hour.

H. H. Dunn, saw mill owner, manufacturer of lumber, lathing, and dealer in rough lumber, etc. He occupies a three story building, 64x60 feet, and manufactures from $40,000 to $50,000 worth yearly. A 20 horse-power steam engine and boiler, with capacity for sawing three tons iron per hour.

E. M. Leavitt occupies a two story wooden building, 20x45 feet, located on Cross Canal, for the manufacture of lasts. Commenced business July, 1869; employs three hands, and turns out 70 pairs of lasts per day.

O. H. Littlefield occupies a two story wooden building, 40x51 feet, with a store house, 35x25 feet, located on Cross Canal, for the manufacture of dress suits and hoods. Commenced business in 1857. Employs five hands. Does a business of $5,000 per annum.

O. B. Miller & Co. occupy a two story wooden building, 60x30 feet, with store house, 30x20 feet, located on Cross Canal, for the manufacture of mouldings of all kinds. Commenced business in 1864. Employ four hands. Consume 40,000 feet lumber per year.

Porter, Thompson & Co. occupy a three story brick building, 60x32 feet, together with a two story wooden building, 60x40 feet, for the manufacture of carriages and sleighs. Commenced business in 1864. Employ fifteen hands, turn out 30 carriages and 22 sleighs per year, and do a business of $60,000 per annum.

Lewiston Falls Manufacturing Co. Capital stock, $400,000. John M. Frye, agent. Two mills. Nos. of machinery, 6; females employed, 300; males employed, 40; kind of goods manufactured, sheetings, repellants, tweeds, and flannels; pounds of wool used annually, 225,000. Commenced manufacturing in 1861; wooden mill built in 1859; brick mill built in 1866.

Lewiston Bleachery. N. W. Farwell, proprietor. Capacity for bleaching and dyeing, 8 tons per day; average amount of cloths bleached and dyed per day, for the past year, 4½ tons; average number of females employed, 9; average number of males employed, 10. Commenced operations in 1866.

Lewiston Gas Light Co. Capital stock, $100,000. J. Pierce Cox, Agent and Treasurer. Average number of men employed, 8. Commenced manufacturing gas in 1851. Number of miles gas manufactured in 1869, 7,967,186.

Lewiston Steam Mill Co. Capital stock, $100,000. James Wood, Agent. Manufactures lumber of all kinds. Amount manufactured annually, 5,000,000 feet; value about $100,000. Hands employed, 30.

Bradley & Co., manufacturers of flour and meal to the value of $50,000 to $100,000 annually.

J. G. Cook & Co., manufacturers of Cook's Chlorate Dentifrice, for cleansing the teeth, hardening the gums, and purifying the breath. Manufacture about 50,000 boxes annually.

Edward Joyce. Loom harnesses. Employs twenty-five females and five males. Manufactures harnesses to the value of from $10,000 to $15,000 annually.

David Scott. Weaver Reeds. Two men employed. Manufactures reeds to the value of from $5,000 to $10,000 annually.

Summary.—Whole number of cotton mills, 9; woolen mills, 7; cotton spindles, 221,000; sets woolen machinery, 22; females employed in cotton and woolen manufactories, 3,664; males, 1,660.

Value of Cotton and Woolen Goods manufactured in Lewiston by the following named corporations, from September 1, 1861, to April 1, 1867: Androscoggin Mills, $10,785,000; Bates Manufacturing Co., $8,440,000; Continental Mills, (From Feb. 1, 1866,) $1,040,000; Franklin Company, $4,535,000; Hill Manufacturing Co., $5,780,000; Lewiston Mills, $2,260,000; Lewiston Falls Manufacturing Co., $910,000. Total, $33,750,00.

Internal Revenue Taxes paid by the principal cotton and woolen manufacturers of Lewiston, from September 1, 1862, to April 1, 1867, (four years and seven months.): Androscoggin Mills, $484,855 42; Bates Manufacturing Co., $354,746 47; Continental Mills, (from Feb. 1, 1866,) $54,941 60; Franklin Company, $187,417 27; Hill Manufacturing Co., $266,979 06; Lewiston Mills, $108,970 77; Lewiston Falls Manufacturing Co., 37,622 30. Total $1,495,532 89.

From September 1, 1862, to July 1, 1864, the tax on manufactured goods was 3 per cent. From July 1, 1864, to April 1, 1865, 5 per cent. From April 1, 1865, to August 1, 1866, 6 per cent. Since, 5 per cent.

In 1850, when operations commenced for the improvement of the power, the population was only about 4,000, and the total valuation $625,596. It is not presumed that the growth of the city has, by considerable, reached the limit due to even the present improvement of the power; but even at its present stage it strikingly illustrates the rapidity with which water-power, when adequately improved, under favorable conditions, accumulates wealth and augments population. If all the available lake surfaces of the Androscoggin were as thoroughly improved as those of the Merrimac now are, the population of the city would probably go up to over 40,000, and with Auburn, which is divided from Lewiston only by the Androscoggin, would probably reach at least 50,000.

The population of Lewiston and Auburn is 21,000, and a part of the growth of Auburn is the result of the improvement of the water-power here, for though there are comparatively no factories there, many live on that side of the river who do business in Lewiston.

Second, Lewiston Lower Power, two miles below Lewiston falls, on the Androscoggin river, of 1,500 horse, which has not yet been improved.

Third, two miles up the river, at "Deer Rips," there is unimproved power of at least 2,500 horse; the two together being sufficient to drive cotton mills containing about 250,000 spindles.

These constitute the principal powers and manufacturing establishments within the limits of Lewiston, though there are some smaller powers used for saw mills, grist mills, etc.

Lisbon, 11½ miles from Brunswick and 51½ from Farmington, a station and town on the Androscoggin Railroad. There are two churches and 500 inhabitants.

Lisbon has eight powers. First, "Lisbon Falls," on the Androscoggin river, in the southeast corner of the town of Lisbon, eleven miles from Lewiston, seventeen from Bath, and thirty from Portland.

There were, originally, two falls about 900 feet apart, giving together a natural fall of thirty-one feet in the distance of 1800 feet, which fall is increased by the elevation of the dam to thirty-three feet.

The upper fall, just below which the dam was located, is formed by a ledge of granite, making directly across to an island about 300 feet distant, thence to the opposite shore, 650 feet further. This ledge extends for more than half a mile down the river, on both sides, giving the best possible foundation for manufacturing establishments.

The dam is in two sections, each resting on the island. It is built on the ledge about eight feet lower than the brow of the natural fall, and being an average height of ten feet, raises the water but two feet above its natural level. It is constructed of hewn timber, in the form of crib-work, the lower tier of which is fitted to all the irregularities in the surface of the ledge, and firmly secured with bolts. The cribs are filled with rock ballast and covered with hard wood plank. The whole work and materials were designed to make it equal or superior to any dam in the country not built of stone. It is believed to be strong enough to withstand any force to which it may be subjected.

The volume of water in the dry season of the year, is 108,000 cubic feet of water per minute, during working time of eleven hours per day, six days in the week, or 427,680,000 cubic feet of water per week. The improvement of the lakes, by which the run of water at Lewiston would be increased, would operate to the same extent in favor of the power at this point.

The power, without any increase as above named, in the dry season, is equal to 5,063 horse-power, sufficient to drive cotton mills containing 303,000 spindles. But a trifling amount of this large power is yet in use. The expense of making the balance available has been pronounced, by competent engineers, very small, compared with the expenditure at other points of corresponding importance as to extent of power.

The lay of the land is favorable for manufacturing establishments, with sufficient room for using the whole power. The surrounding territory is inhabited by farmers who furnish abundance of produce for the support of a large population.

The Androscoggin Railroad runs through the land of the company, giving ample conveniences in the way of side tracks, to warehouses for storage of raw materials, fuel, &c., and for shipment of manufactured goods without drayage. By railroad Lisbon Falls is thirty minutes from Lewiston, one hour from Bath, one and a half hours from Portland, and six hours from Boston. Raw materials and manufactured goods can be transported to and from the mills as cheaply as from other interior manufacturing towns.

The power is owned by the Androscoggin Water Power Company, Oliver Moses, President; G. C. Moses, Treasurer. This company also own the real estate along the river, the toll bridge, saw and grist mill on the lower fall, and other property in the vicinity.

The only company now in occupation of the power is the Wormbo Manufacturing Company.

Building materials of all kinds are to be obtained in the immediate vicinity at reasonable rates. The Water Power Company own two saw mills, supplied with abundance of pine and hemlock from the surrounding country. Brick of excellent quality are made upon the land of the company. Abundance of stone suitable for foundations and canal walls can be had on the spot where it is wanted. The village is yet small, but growing, and a commendable improvement in schools and churches is already manifest. To make an increased supply of water at Lewiston available at this point, it would only be necessary to provide means to hold back the water, left in the river between the two places after close of work at Lewiston, for use the next day, as the arrangements there would of course be complete for holding all the water coming down to that point in the night. The reservoir above the dam at Lisbon Falls being very large, but slight alteration would be required. With this increase the power would be nearly double that now used at Lewiston, and would support a population of 20,000 persons.

Second and Third at Factory village, on Sabattus river, owned by N. W. Farwell of Lewiston. The upper one has a fall of ten feet; is under improvement; double turbine wheel; power, 175 horse. Lower fall not improved, save by an old grist and saw mill. Fall, twenty feet; power, 350 horse. Stream connected with the Great Sabattus pond; water constant. Freshets not destructive.

Fourth, at Lisbon village, on the same river, about one-third of a mile from the Androscoggin river; twenty feet fall; unimproved; owned by B. Farnsworth and others.

Fifth, about one-fourth mile above; fall, twelve feet; the property of the Paper Company; mill built 1866; manufacture one and a half tons newspaper per day; machinery best quality.

Sixth, just above, the property of the Farnsworth Manufacturing Co.; fall, 15 feet.

Seventh and Eighth on Little River stream, near its junction with the Androscoggin.

Farnsworth Co. — This company was incorporated in 1865, with a capital of $100,000. Wm. Deering, President; B. B. Farnsworth, Agent; W. F. Milliken, Treasurer.

The mill buildings are built of brick and wood. In the mill there are six sets of machinery for the manufacture of fancy cassimeres, repellants, cloakings, &c., &c., turning out 50,000 yards of three-quarters goods per month. The mill is supplied with power from the Sabattus river.

Messrs. Deering, Milliken & Co., of Portland and New York are their selling agents.

Worumbo Manufacturing Co. — This company was established by Oliver Moses, of Bath, and others, in 1864. Capital stock, $240,000. This company runs ten sets machinery employing [illegible] and one hundred hands, producing about 120,000 yards six-quarters all wool beavers per year. The motive power is furnished from two turbine wheels of 150 horse power combined. Oliver Moses, President; G. C. Moses, Treasurer; office in Bath. F. [illegible], agent, at the mills. [illegible] & Co., of Boston and New York are their selling agents.

LITTLE RIVER, 8 miles from Brunswick and 42½ from Portland, a village on the Androscoggin railroad, with 1,200 inhabitants and two churches.

LIVERMORE FALLS, 46 miles from Lewiston and 89 from Portland, a village in the town of Livermore, on the Androscoggin Railroad. The village has four schools and two churches. Livermore [illegible] another township of land, and is situated on both sides of the Androscoggin river.

Hutchins & Lane. — In 1862, H. Wesley Hutchins established the manufacture of [illegible] and all kinds of small packing boxes, including berry boxes, etc. They occupy four buildings, one being 60 x 40 feet, two stories each, and two 40 x 40 feet, one story. Employ fifteen men. The motive power is furnished from a Blake wheel 5 feet in diameter, of 80 horse-power. This firm are also engaged in manufacturing brush makers' veneers. They are the proprietors of Stoddard's patent cutting machines, running two [illegible], one for [illegible] and the other for lumber, veneers, etc.; also five sawing machines of different kinds. E. W. Foss, 141 William street, New York, is their selling agent.

F. G. Cole, commenced the manufacture of wax thread [illegible] in 1865, and manufactures about 40 dozen daily. He has in connection a machine shop for the repair of sewing machines. Employs, in both departments, ten men. Runs an 8 horse Blake wheel for driving machinery.

LOCKE'S MILLS, about 60 miles from Augusta and 58 from Portland, a station on the Grand Trunk railroad, in the town of Bethel.

Dearborn, Brownell & Co., occupy a three-story wooden building, 80 x 100 feet, with store-house 30 x 50 feet, on the Grand Trunk railroad, for the manufacture of [illegible] and [illegible] spools. Commenced business at this place in March, 1868. They employ 50 hands. Their machinery consists of 12 spool machines and other machinery, driven by 2 [illegible] water-wheels, 100 horse power. They consume from 800 to 1000 cords of wood, and produce 1000 gross of spools per annum.

MECHANIC FALLS, 37 miles from Portland, a village of 1,000 inhabitants on the Grand Trunk. It has four churches and 300 voters. The village is located in the town of Minot, a large and excellent township. The Androscoggin passes its eastern border. Minot is connected with Lewiston by a bridge.

Minot has three powers. First, on Bog brook, "Farmer's Mill;" fall 12.5 feet in 880 feet; operates part of the year.

Second, "West Minot Falls," on Bog stream; fall 22.5 feet in 200 feet.

Third, "Hillman Falls," on Bog stream; power not used.

First and second partially improved in saw mills and a planing mill. Stream will run the planing mill all the year. One-third of the basin covered with woods.

Minot and Poland, the town adjoining, has four powers. All these are situated on the Little Androscoggin river. First, "Mechanic Falls," [illegible] feet in 300 feet distance; velocity of current [illegible] feet per minute. Area of cross section 270 square feet. Power one half improved; partially improved in paper making. A fine stone dam at the head of the fall; a wooden dam midway, and space for another dam below. Turbine wheels. Power owned by A. C. Denison & Co.; mills operate all the year.

Second, "Page's Mills," fall fourteen feet in 1,000 feet distance. Volume of water same as at Mechanic falls, less Waterhouse brook, which is 3,000 cubic feet per minute. Power partially improved in sawing lumber in the manufacture of [illegible], and grist mill; mills operate all the year; power owned by Moses Page and A. A. [illegible].

Third, "Hackett's Mills," fall thirteen feet in [illegible]. Volume of water same as at Mechanic falls, plus Bog brook, 1,500 cubic feet per minute. Improved in part in saw mills;

power owned by J. T. Waterman and Willard Buck; mills operate all the year.

Fourth, "Minot Corner" fall, 11.5 feet in 500 feet run. Volume of water same as at Hackett's mills, with the addition of a small tributary. Improved in part in saw mills and grist mills; mills operate all the year. Owned by A. S. Freeman, Willard Buck, et al.

The river is connected with fifteen large ponds and numerous small ones. Their capacity can be largely increased for reservoir purposes, to the amount, it is estimated, of doubling the power. Sites for building excellent; danger from freshets small.

A. C. Denison & Co. occupy five mills for the manufacture of paper. The business was established in 1853. The mills are named as follows: Eagle, Star, Diamond, Union, and Calendar.

Eagle Mill, a two story wooden building, with basement, 180 x 85 feet; bleach building, two stories, 85 x 45 feet; store house, two stories, 40 x 100 feet; stock house, with basement, 45 x 125 feet, for the manufacture of fine book paper. Mill built in 1853. Employs 28 men, 26 girls. The mill has nine 36 inch engines, has two rotary boilers, one 24 feet long, 6½ feet diameter, the other 22 feet long, 6 feet diameter. Machinery is driven by two Chase and two Upham water wheels, with 17 feet head and fall, 162 horse-power combined. In this mill they consume 2¾ tons of rags, and produce 2 tons of paper per day. Have one patent tubular boiler for heating.

Star Mill, a two story wooden building, with basement, 45 x 130 feet; machine room, two stories, 40 x 90 feet; stock house, two stories, 40 x 78 feet, for the manufacture of superfine paper; built in 1860. They employ 15 men, 14 girls. The mill has four 36 inch engines, one Kingsland engine, and one 66 inch Fourdrinier machine; has one rotary boiler, 20 feet long, 5½ feet diameter; one tub beach, 7 x 9 feet. Works are driven by two Chase, two small Upham, and one small Tyler water wheel, 125 horse-power combined. They consume in this mill 1½ tons of rags, and produce 1½ tons of paper per day, and have one patent tubular boiler, 85 horse-power, for heating purposes.

Diamond Mill, a two story wooden building, 100 x 55 feet; bleach house, two stories, 35 x 45 feet, for the manufacture of book paper. Mill was built in 1865. Employ 15 men, 14 girls. The mill has four 32 inch engines, and one Kingsland engine; one rotary boiler, 23 feet long, 5½ feet diameter, with one 68 inch Fourdrinier machine. Machinery is driven by one large Chase, two small Upham, and two small Blake water wheels, 17 feet head fall, 125 horse-power combined. Has one patent tubular boiler, 85 horse-power, for heating and boiling. Consume in this mill 1½ tons of rags, producing 2,200 pounds of paper daily.

Union Mill, a two story wooden building, 40x80 feet, bleach house, 25x40 feet, for the manufacture of first quality of news paper. The mill was built in 1866. Employs six men and two girls. The capacity of the mill is three 28-inch engines and one 38-inch cylinder machine, with one rotary boiler eighteen feet long and five and a half feet in diameter; receive steam from Star mill for boiling; the machinery is driven by one large Chase and two small Upham water wheels, 14 feet head fall and 65 horse power combined. Consume, 2,400 pounds of rags, producing 1,600 pounds of paper.

Calendar Mill, a two story stone and brick building, French roof, 40x90 feet, for the finishing of paper, built in 1868. Employ five men and six girls; have one stack superfine calendars, 48-inch; six rools and one stack 33-inch calendars, eight rolls; two 72-inch cutters and ruling apparatus; run one Chase water wheel, 17 feet head fall, 50 horse power. This firm have also five storehouses for storing stock and chemicals, namely, 1, 2, 3 and 4, 40x55 feet each, two stories, No. 5, two stories, 35x45 feet.

John Winslow occupies a two story wooden building, 36x40 feet, and storehouse, two stories, 40x30 feet, for the tanning of leather. Commenced business in 1848. Employs eight hands, consumes 200 cords of bark, tans 2,000 hides per year; runs one Tyler 42-inch wheel.

Furlong Paper Manufacturing Company occupy one floor of a three story wooden building, 40x80 feet, for the manufacture of paper bosoms, cuffs and collars. Commenced business in 1867. Employ ten hands, consume one ton of paper per month and produce 1,000,000 ladies' collars, 100,000 cuffs and 1,500,000 bosoms per year. Do a business of $75,000 per annum.

Milford, 13 miles from Bangor, a village at the terminus of the Bangof, Oldtown and Milford Railroad.

Monmouth, 48¼ miles from Portland, and 90 from Bangor; a station and town on the Maine Central Railroad. The town is watered by some of the sources of the Cobbessecontee. Incorporated, 1792; contains 6 churches; 1 hotel; 465 polls; rate of tax, 18 per cent; 23,040 acres of land.

There are nine powers in this town, four of them are situated upon Wilson stream, at North Monmouth, within abont one-third of a mile, the total descent in that distance being fifty feet.

First, on the upper dam is a webbing factory, doing a business when it runs the whole year, of about $25,000. Also on the same dam, a shovel-handle factory, which turns out some forty dozen shovel handles per day. In the same building is a shoe-peg factory, which manufactures some 3,000 bushels pegs annually. Also a saw mill, which cuts some 300,000 of lumber annually.

Second, on the second dam are a webbing factory, heel-iron works, and spinning-frames for spinning woolen yarn, the latter two doing $25,000 per annum.

Third: the third dam is used in the manufacture of shovels and hoes,—some twelve to fifteen hundred dozen of shovels, and some eight hundred dozen hoes, annually.

Fourth, the fourth dam operates a grist mill, doing a common custom business in an agricultural town.

Wilson stream is very safe; no damage has occurred by freshets for fifty years; double the business could be done that is now, if the water were properly husbanded. Some 150 men and women are engaged in these several shops and mills. The stream is fed by three ponds, whose combined area is three or more square miles. Mills operate the whole year.

Fifth, sixth, seventh and eighth; the Cochnewagan stream at Monmouth Centre, has four dams, the fall being sixty feet in one-fourth of a mile. On the first, a grist mill; on the second, some twenty rods below, a shingle and jobbing mill, which runs some two-thirds of the time; on the third, a sash, door and blind factory; on the fourth and last, a saw mill, which cuts from 300,000 to 500,000 feet of boards, etc., during the year. Double the business might be done on this stream that there now is. In seasons like the present there is water enough to run the mills the entire year. Pond one and one-half by three-fourths miles. The several mills are worth about $9,000; operate about three-fourths of the year.

The Juggernaut stream, at East Monmouth, has one dam, with a saw and shingle mill upon it. There is a most ample

supply of water furnished by some eight or more ponds, of the Cobbosseecontee series. The dam might be raised so as to give some ten feet head and fall, with some damage for flowage, and then a large factory might be run the entire year.

The Blake wheel is chiefly used; a small amount of stone suitable for building; lay of the land, for building, quite good; no forests of importance. The mills are of a sort to employ few workmen, accordingly their influence upon the population is not great. Annual production $175,000.

OWEN & SPRAGUE. This firm has recently commenced the manufacture of doors, sash and blinds, occupying a two story building, 50 x 40 feet, employing two men. The motive power is furnished from a turbine water wheel.

SMALL & LARRY, located at East Monmouth, three miles from Monmouth, established business in 1864. They occupy a three story building, 25 x 50 feet, for the manufacture of salt box shooks and drug cases. Employ from seven to ten men, produce about 300 shooks per day, and do a business of $10,000 per annum. They use to drive their machinery, etc., two water wheels of 25 horse power.

MORRILLS, a country station on the Portland & Rochester Railroad. It contains one church.

The factory of the WESTBROOK BRITANNIA CO. is situated at the terminus of the horse railroad and near the junction of the Kennebec & Portland and the Portland & Rochester railroads. They manufacture silver-plated and britannia ware and planished ware, and hold several patents on their goods manufactured. They employ about thirty men, and have found rapid sales for all goods made the past year, and in fact, the demand has exceeded the supply. J. A. Thompson is Superintendent and W. W. Stevens acts as Agent. Their office is at 176 Middle street, Portland.

CHARLES MERRILL occupies a three-story brick building, 80 x 40 feet; also occupies at Stephens Plains a tannery, 75 x 30 feet, and manufactures every variety of sheepskins, linings, bindings, etc. The business was established about 1855, and gives employment to 16 persons.

A. MCKENNEY, tanner and manufacturer of upper leather and calf skins, commenced business in 1864. He occupies a three-story wooden building, 30 x 24 feet, located at Stephens Plains, in the town of Westbrook, and finishes 400 skins per week, employing 10 hands, and doing business to the amount of $60,000 per annum.

N. K. SAWYER, manufacturer of grain leather, pocket-book skins, etc., occupies a two-story wooden building, 30 x 80 feet, with a large 80 x 40 feet. He commenced business in 1845. Has 3 employees, and has a capacity for tanning 1,200 hides, and turns out 2,500 skins annually. The machinery is driven by an engine of 20 horse power, built by C. Staples & Son of Portland, with a flue boiler 35 horse power, built by Quinn & Co. of Portland. Does business to the amount of $40,000 per annum.

NEWPORT, 111 miles from Portland and 27 from Bangor, a pleasant village and town on the Maine Central Railroad.

A fine farming town watered by a large and beautiful pond, whose outlet is the Sebasticook river. A branch railroad runs to Dexter, fourteen miles, which was completed in the summer of 1868.

Newport has three powers: First, on the Stetson stream; saw mill and shingle mill.

Second, on the Millikin stream; saw mill and shingle mill.

Third, by far the most important, the "Newport Village Power," at the outlet of Newport pond; fall fourteen feet in seventy-eight rods distance. It is improved in part, by a grist mill, saw and shingle mills. The power was formerly wholly used by a tannery and foundry. The power can operate all the year, though it is not now generally used throughout the year. If wholly improved, it will cut 8,000,000 feet of lumber, and manufacture 3,000 barrels of flour annually.

Wheels—turbine, tub and Gould. The power is sustained by the Newport pond, which covers eight or nine square miles. Dam, now raises a head of four feet on the pond; can be raised still higher; entire safety from freshets; no damage has ever been done; granite abundant and good; lay of the land convenient for improvements; lumber southerly. The power, though inadequately improved, has built up a flourishing village; annual production $75,000.

NORTH BELGRADE, 72½ miles from Portland, 60 from Bangor, a station in the town of Belgrade, on the Maine Central Railroad.

NORTH BERWICK, 34 miles from Portland and 18 from Portsmouth, a station and town on the Portland, Saco & Portsmouth Railroad.

The town was incorporated in 1831, and was taken from the east side of Berwick.

North Berwick has ten powers. Eight of these are situated upon the Great Works river, and two upon the Neguntaquit river. They vary in height from two to thirty-five feet, in a distance of one to twenty-five rods.

The power is not all improved. Partially improved is saw mills, grist mills, etc., and one woolen factory. The mills operate nearly all the year. The machinery employed is, in part, very good; turbine wheels used.

Power is owned by the North Berwick Co., and others.

The main stream is connected with two ponds which contain from two to three square miles. Artificial reservoirs not feasible. Rocks not suitable for building; convenient land. Lay of the land, about the falls, good. One-third of the banks of the stream covered with forests. The improvement of the power has been of decided advantage to the wealth of the town.

Berwick, the adjoining town, has six powers. They are located in the order in which they are named below, the first three opposite the village of Great Falls, and the last two opposite the village of Salmon Falls, N. H. All on Salmon Falls river.

The first four are known as the "Great Falls" on Salmon Falls river, and the last two as "Salmon Falls." More definitely—No. 1 the Mast Point Privilege; No. 2 Great Falls Manufacturing Co.'s upper head; No. 3 Great Falls Manufacturing Co.'s 2d level; No. 4 Great Falls Manufacturing Co.'s 3d level; No. 5 Salmon Falls Manufacturing Co.'s upper level; No. 6, Salmon Falls Manufacturing Co.'s lower level.

The natural descent is determined as follows: No. 1 is 8 feet fall; No. 2, 32 feet; No. 3, 32 feet; No. 4, 24 feet; No. 5, 13 feet; No. 6, 22 feet. Total, 118 feet, of which 107 are obtained in two miles and five-eighths, at which [illegible] [illegible].

No. 1 is simply a flume for the mast horse. It is filled by night and drawn down by day, and often no water runs to waste by night. It is supplied by the reservoir ponds above, from which is drawn in twenty-four hours what the mills of the Great Falls Manufacturing Co. use in sixteen. The

quantity is 409 cubic feet of water per second, which if used on a fall of eight feet would give an absolute power of, say 371 horse power; but the great variation in the head renders it of little value for operations at the dam.

The above quantity flows to Nos. 2, 3, and 4 successively, and would give 1,530 horse powers to each, or 4,590 horse powers to the three. It then flows to Nos. 5 and 6, and would give respectively 880 and 973 horse power. As the thread of the Salmon Falls river is the boundary line between this State and New Hampshire, only one-half this power, or 3,221 horse power, is in this State.

North Berwick Company, manufacturers of shirting flannels, machine blankets, roller cloth, &c., were established in 1837. The factory is 41 x 120 feet; three stories high; basement and double attic of brick, together with all the necessary auxillary out-building. They employ 80 hands, run six sets of machinery and produce 2000 yards of flannel daily, which is the principal production. They use water power, having a fall of 18 feet, and a 16 inch cylinder Woodruff & Beach steam engine, as auxillary. Deering, Milliken & Co., agents in Portland and New York. The mill is located on "Great Works River."

Timothy B. Hussey, manufacturer of plows and cultivators, and plow handles, occupies a foundry 100 x 40 feet, also a mill 100 x 40 feet, located a quarter of a mile from the railroad station. He commenced business in 1857, and has twenty employees, producing annually 2000 plows. A water wheel of 60 horse power drives the machinery.

The North Berwick Company was incorporated in 1837 with a capital of $80,000; William Hill, President; William Hobbs, Treasurer and Agent. The buildings occupied by them are as follows: a four story brick mill 42 x 130 feet; a three story wooden building 32 x 50 feet used as a machine shop; a three story wooden building 35 x 55 feet used as a store house; a one story wooden building 20 x 50 feet, used as a dye-house, and several outbuildings containing store houses, offices, &c. They employ 80 hands, run six sets of woolen machinery, and manufacture 900 bales of flannel per year. The motive power is suppled by a turbine water-wheel of eighty horse power, built by Kilburn, Lincoln & Co., of Fall River, Mass., and by an engine of sixty horse power, built by Woodruff & Beach, of Hartford, Conn., with two tubular boilers of 50 horse power each, built by Kendall & Roberts of Cambridgeport, Mass.

F. O. Johnson established business in 1865, with a capital of $6,000. He occupies the second story of a building 60 x 40 feet, for the manufacture of ladies', misses and childrens boots and shoes. Employs 35 hands.

North Jay, 52 miles from Lewiston, and 86½ from Portland. A country station in the town of Jay, at a bend of the Androscoggin river. There is much valuable land in Jay. The inhabitants are principally farmers.

Jay has five powers. First, "Stubbs' Mill," on a small stream in the eastern part of the town, and a saw mill.

Second, "Looks' Mill," in the north part of the town, on a small stream; a saw mill, that does a good business sawing lumber, spring and fall.

Third, "Jay Bridge Falls," on the Androscoggin river, about three miles above Livermore falls. The total height of the falls at this point is estimated at twelve feet, attained in a running distance of six rods. A good modern dam has been built; only a saw mill upon it. Privilege owned by Hon. John Lynch, of Portland.

Fourth, about one mile below Jay Bridge, "French's Falls," on the Androscoggin. Total height of these falls, ten feet. No part of the power is improved. The privilege is owned by Maj. Stillman Noyes, of Jay, on the east side of the river; on the west, by E. Treat, of East Livermore.

Fifth, below the above-named falls, the "Otis Falls," on the Androscoggin, situated about one-half mile above Livermore falls. The total height of said falls is fourteen feet, within a running distance of six rods. No part of this power is improved, either by mills or dam. It is owned by Capt. Ezekiel Treat, of Livermore falls, and Dr. Kilburn, of Lewiston.

Granite is abundant in the vicinity of all the before-mentioned falls; a large quarry within one mile of Jay Bridge falls, with descending ground the whole distance. Lay of the land upon all the powers, all that could be desired for convenience. Proprietors would probably aid in a survey.

If the low summer run at Jay Bridge be assumed to be twenty per cent. less than at Lewiston, or 75,200 cubic feet per minute, the resultant power for the whole series of falls would be 3,744 net horse-powers, or 204,640 spindles.

North Leeds, 36 miles from Lewiston and 70½ from Portland, a country station on the Androscoggin railroad.

North Yarmouth, about 15 miles from Portland, a station and town on the Grand Trunk railway. North Yarmouth was settled the first time, A. D. 1681, which settlement was broken up by the Indians; and again, June 28, 1722. Incorporated Jan. 31, A. D. 1731. Population, 1,076. Taxable property, $490,000. Rate of taxation for 1868, 1½ per cent. Number of polls, 245; churches, 2; school-houses, 7; number of scholars, 300; number of acres covered by the town, 13,000; number of houses, 195; cows, 350; number of tons of hay, 5,000. North Yarmouth is now an inland town. Formerly it embraced Cumberland, Yarmouth, part of Harpswell, and several islands in Casco bay. This town has always been noted for its agricultural products. The town records of North Yarmouth are probably the most perfect of any that can be found in the State, commencing July 13, A. D. 1681, when certain individuals, viz., Bartholomew Gidney, Josiah Scotton Silvanus, Davis and Walter Gendall, were appointed by the Governor and Colony of Massachusetts proprietors of a township formerly called Westcostogo, now North Yarmouth, and continuing to the present date. Although the first settlement was broken up, the proprietors' records were preserved.

North Yarmouth has two powers. First, "Porter's Mills," on Royal's river.

Second, "Masters' Mills," on east branch of Royals river.

The power is sufficient to drive a saw and two run of stones the year round.

Oak Hill, a country station on the Portland & Kennebec railroad, situated 26 miles from Portland and 78 from Skowhegan.

Oldtown, about eight miles from Bangor, on the Bangor, Oldtown & Milford railroad, contains 8 churches, 4 hotels, and one bank. The number of polls is 675, and the population of the town amounts to 3,860. The town covers in extent 22,000 acres of land, and the rate of taxation is three and nine tenths per cent.

OXFORD, 15 miles from Lewiston, and 40 from Portland, a station on the Grand Trunk Railroad, situated in the town of Oxford. There are two villages in this town; Oxford village, pleasantly situated on a branch of Little Androscoggin river, one mile from the station, and Welchville, one mile from Oxford village, and one and one-half miles from the station. The town is watered by the Little Androscoggin river, its branches and several ponds. Oxford was incorporated 1829; was a part of Hebron from 1792 to 1829. Amount of taxable property (1860), $11,085 00. Valuation of real and personal property, $2 [illegible]; rate of taxation 2 1-10 per cent. Number of polls, 021; churches, 3, 2 Methodist, 1 Congregationalist; school houses, 12; hotels, 2; population about 1,600; children attending schools, 323; number of scholars, [illegible]; acres of land, 22,341; sheep, 1,400; oxen, 230; cows, 181; horses, 1[illegible]; [illegible], 282.

Solon Rawson & Co. occupy a two story wooden building, 48 x 30 feet; ell, 15 x 20 feet; cooper shop, 24 x 24 feet; store house, 18 x 25 feet, for the manufacture of shovel handles, shook, staves, clapboards, etc. Commenced business in 1864; employ ten hands. Machinery is driven by one turbine water wheel, 40 horse-power. They use 1000 [illegible], 20,000 [illegible], 1,200,000 shingles per year.

Robinson Manufacturing Co. Incorporated in 1863. Capital $100,000. Manufacture repellants, cassimeres, shawls, blankets, flannels, etc., etc. This company are running at present but 2 sets cards and 12 looms, producing 4,500 yards 6-4 goods weekly. They own two mills; old mill, 45 x 70 feet, two stories and attic, of brick; new mill, 44 x 110, four stories, of brick; also have one grist and eight other mills and buildings for storage, dye house, waste house, laundry, etc. Boiler house, dye house and picker house adjoin the main mills, only one of which they are running. Employ 80 hands. The motive power is furnished from a turbine wheel built in Fall River, Mass., by Kilburn, Lincoln & Co. For heating mills and furnishing steam for dye and dry houses, they have two boilers built by McKay & Aldus, of Boston, and Chas. Staples & Son, of Portland, Me.

PISHON FERRY, 92 miles from Portland and 8 from Skowhegan, a country station on the Portland & Kennebec railroad.

PITTSFIELD, 104 miles from Portland and 34 from Bangor, a station and town on the Maine Central railroad. The town of Pittsfield is of excellent soil. A branch of the Sebasticook river in the southeast corner.

Pittsfield has three powers. First, "Douglass ledge," on the west branch of the Sebasticook river; fall fourteen feet in 100 rods. Unimproved.

Second, on the same stream, "Hathorn's Mill;" fall fourteen feet in forty rods; will manufacture 4,000,000 shingles, 2,000,000 long lumber, 10,000 [illegible], grind 100,000 bushels of grain annually. This is about one-fifth of what all would do if improved. Occupying [illegible].

Third, "Call Rips," on the same stream; seventeen feet in 200 rods. Unimproved.

Several lakes and ponds, among them Moose pond, eight by one miles. All can be converted into reservoirs. Granite in the shape of boulders, suitable for building. Pittsfield [illegible] of [illegible] with [illegible]. Improvement in power has aided the town. Annual production, $[illegible].

The Pittsfield Pioneer Woolen Mills, Deleano Hunt & Co., Proprietors, were established in February, 1867. The building is 130 x 50 feet, three stories and attic, with a dye house, 40 x 30 feet, and is located on the Sebasticook river, near the railroad station. The mill was built for four sets of machinery, but at present are running only two sets, with 11 broad Crompton looms and 960 spindles, and manufacture Scotch cassimeres, consuming about 124,000 pounds of domestic fleece wool per annum. Their machinery is driven by a Warren turbine wheel of forty horse power, the fall being eight feet. They also have in use a Harrison Steam Boiler for heating and dyeing purposes.

PORTLAND is in north latitude 43°, 39', 27" W. longitude from Greenwich 70°, 15', 40". It is 1[illegible] miles from Washington, [illegible] from New York, 108 from Boston, 294 by the Grand Trunk Railroad to Montreal. The Portland, Saco & Portsmouth Railroad, Maine Central and Portland and Kennebec Railroads center here. The first 12 miles of railroad in Maine was opened in 1848 from Portland to North Yarmouth.

The settlement of the territory now called Portland was commenced in 1632 by two persons from Plymouth, England, George Cleeves and Richard Tucker. Massachusetts by a liberal construction of their charter in 1658 extended their jurisdiction over it and gave the name of Falmouth to the whole region from the Spurwink river to the bounds of Casco Bay and for seven or eight miles into the interior, but the present territory of Portland continued to be called the Neck or Casco Neck. In 1676 the settlement was laid waste by the Indians and the inhabitants were slain or carried away captive.

In 1678 the locality again began to invite the presence of settlers and after the lapse of about ten years had become quite a town when the French and Indian war broke out and most of the settlers fell. In 1690 the chief fortification of the region was captured by the French and Indians, its garrison carried away, and it again became destitute of inhabitants. It remained thus until 1716, when a few of the old inhabitants commenced a settlement which continued to increase until the breaking out of the revolutionary war, when the Neck contained a population of about 2,000. Again the place was doomed to destruction. On the 18th of October, 1775, an English fleet under command of Capt. Henry Mowatt bombarded and set it on fire, and it was almost wholly destroyed. The first house erected after the conflagration was by Joseph H. Ingraham. In 1786 the Neck was incorporated as a separate town by the name of Portland, having again increased its population to 2,000. From that period Portland has continued to advance steadily, save [illegible] in the way of prosperity, until at the present time it contains a population of 33,000. It is situated on a peninsula which has [illegible] Casco bay, the harbor being on the southeasterly side and an inlet known as "Back Cove" on the northwesterly side. This peninsula is about three miles from N. E. to S. W.; the average breadth being about three-fourths of a mile. Congress street runs through the entire length of the city and is one of the principal business streets. At each extremity of the city is a promenade one hundred and fifty feet in width and lined with beautiful shade trees. Portland was incorporated a city in 1832, Andrew L. Emerson being the first mayor. There are twenty-eight churches located here of which two are Unitarian, [illegible] Congregational, one Baptist, one Freewill Baptist, two Episcopal, three Methodist, one Catholic, two Universalist, one Swedenborgian, one church of the Ministry-at-Large, one Second Advent, one Spiritualist Association and one Friends' Chapel. There are [illegible] public schools [illegible] of which one is High, eight Grammar, [illegible] Intermediate and [illegible] Primary; also the [illegible] school, Orphan Asylum

school, Peack's island and Long island schools. The whole number of children attending is 10,463. The valuation of real estate in 1868 was $16,181,900; personal estate, $12,390,578; total $28,572,478. Number of polls, 7,738. Rate of tax, $2.50 on each $100.

The number of Banks in the city is seven, which are as follows: Canal National, capital $600,000; Casco National, capital $250,000; First National, capital $800,000; Merchants National, capital $300,000; National Traders Bank, capital $250,000; Second National, capital $100,000. There are two Savings Banks — the Maine Savings Bank (formerly the Portland Five Cents) and the Portland Savings Bank.

There are fifteen halls, the largest of which are the City Hall, on Congress, head of Exchange street; Deering Hall, corner Congress and Preble streets; Congress Hall, corner Congress and Elm streets, and Lancaster Hall, on Market Square, head of Centre street. The principal associations are the Mercantile Library Association, object mutual improvement and intellectual culture by discussions, lectures, and the use of a valuable library; Portland Horticultural Society, for the promotion of horticultural and floral knowledge; Portland Dispensary, object, the providing of medical attendance and medicines for the poor. It is a worthy association, and deserves the aid and sympathies of the benevolent; Portland Society of Natural History, organized 1843, object, the collection of a cabinet of mineral, vegetable, animal and marine curiosities; room in City Hall building.

This city was visited by a very destructive fire, July 4th, 1866, destroying the business portion. It is now gradually rising from its ruins, and no city of its size can boast of finer public buildings and elegant stores than Portland. The location of Portland is calculated to exhibit the city very favorably on approaching it from the sea, as the buildings rise between the two hills in the form of an amphitheatre. On the site of old Fort Sumner is an observatory, about 70 feet in height, commanding a delightful view of the city, the harbor, the islands in Casco Bay, and extending northwest to the elevated peaks of the White Mountains. The access to Portland by sea is easy, its harbor (one of the finest, if not the best in the world) safe and spacious, and rarely obstructed by ice. Portland is the nearest seaboard market for the rich and beautiful country on the upper waters of the Connecticut river, to which a railroad is now being built, passing through St. Johnsbury, Vt., on to Ogdensburg, N. Y., where water communication is had to the great West and her rapidly growing cities. This communication makes Portland the nearest seaboard city by fifty miles, between the great West and Europe. This new road is being rapidly pushed to completion, and Hon. Calvin Morrill, one of its projectors, asserts that trains will be running from his home (St. Johnsbury, Vt.) to Portland, in 1871. The charter of the Portland & Ogdensburg Railroad extends from Portland to the State line at Conway, N. H.; the Portland, White Mountain & Ogdensburg charter commences at said Conway, and runs across New Hampshire to Dalton, on the Vermont line; the Essex County charter begins at said Dalton and extends to St. Johnsbury, Vt.; the Montpelier & St. Johnsbury charter extends from said St. Johnsbury to West Danville; the Lamoile Valley charter begins at said West Danville and connects with the Vermont Central Railroad at Swanton, Vt. Distance from Portland to Swanton, 212 miles. It embraces five charters, one in Maine, one in New Hampshire, and three in Vermont. The actual stock subscription on the whole line is nearly $3,000,000. The Falmouth House, St. Julian, United States, and Preble Hotels are the principal public houses here, and for elegance, convenience and all the modern improvements, are not surpassed by those in larger cities. There are numerous resources in the interior not yet brought into activity, which will give to this place continually increasing importance, and reward the exertions of its intelligent and enterprising inhabitants.

MANUFACTURERS.

The Portland Leather Company, located on Grove street, was incorporated in 1868 with a capital of $50,000. James Bailey, President, and Wm. Gray, Treasurer and Agent. The buildings occupied by them are 1½ story wooden building 70 x 110 feet, and three 2 story wooden buildings 30 x 75 feet, 40 x 40 feet, and 16 x 40 feet respectively. In the tannery are 145 pits. They employ 25 hands in the manufacture of sole, upper and patent leather, of which they turn out 20,000 sides per year. Their machinery is run by an engine of 26 horse power with a flue boiler of 40 horse power.

H. & C. H. Fling, wool pullers and tanners of sheep skins. Commenced business in July, 1868. Their establishment is on Grove street, and the buildings occupied by them are as follows: a five story wooden building 45 x 60 feet, used for pulling and drying wool; a two story wooden building 30 x 90 with an ell 30 x 60 used for tanning and finishing the skins, and a two story building 30 x 40 used as a store house, with a number of smaller out-buildings used as store houses, offices, &c., also of wood. They employ about fifteen hands and pull and finish about 100,000 skins per year. Their machinery is run by an engine of fifteen horse power, built by Ira Wise, with a flue boiler of thirty horse power, built by Quinn & Co., of Portland.

E. M. Lang occupies one floor of a two story brick building, located at No. 100 Green street, for the manufacture of dies and solder, and gives employment to eight hands. Commenced business in 1866.

Martin, Pennell & Co. occupy a two story wooden building, 40x120 feet, located at No. 21 Preble street, for the manufacture of carriages and sleighs. Commenced business in 1849, employ twenty hands and do business to the amount of $25,000 per annum.

J. Driscoll & Co. occupy a foundry building covering an area of six thousand square feet, located at No. 100 Green street, where they manufacture machine and shop castings and job work. Commenced business December 7th, 1868, employ eight hands and make about one hundred and fifty tons of castings per year, and do business to the amount of about $16,000 per annum.

Henry Hanson, manufacturer of marble monuments, grave-stones, counter-tops, &c., commenced business in 1855. He occupies the first floor of a two and a half story wooden building, 30x55 feet, located at the north end of Deering's Bridge, employs twelve hands and does a business of about $9,000 per year.

Farwar & Adams, carriage and sleigh manufacturers, commenced business in 1865; they occupy a three-story wooden building, 25x60 feet, also one of two stories 25x60 feet and one of one story, 25x50 feet, located at the corner of Portland and Hanover streets. They employ twelve hands and do a business of $9,000 per annum.

Daniel Winslow & Son, manufacturers of steam engines, boilers and general machinery, also every description of steam piping. Commenced business in 1847. They occupy a three story wooden building 90 x 30 as a machine shop, connected with which is a blacksmith shop 50 x 30 feet, located on Cross street. Their machinery is driven by an engine of twenty-five horse power. This firm employ 30 hands and do business amounting to $35,000 per annum.

Burgess, Fobes & Co., manufacturers of white leads and ground colors, commenced business in 1859, and have twelve employees. They occupy a two story wooden building, 60 x 40 feet, with engine and boiler room attached, 18 x 18

WINSLOWS' MACHINE WORKS.

DANIEL WINSLOW & SON, Proprietors.

MANUFACTURERS OF

STEAM ENGINES, BOILERS,

And General Machinery;

—ALSO—

Steam-Heating Apparatus

"HIGH PRESSURE AND LOW PRESSURE."

WITH A FULL STOCK OF FIRE COURT VALVES AND CONNECTIONS TO WHOLESALE AND RETAIL.

CROSS STREET, Portland, Me.

fire, located at No. 20 Murray street, and run six grinding machines, with a capacity for grinding 6,000 pounds per day. An engine of 35 horse-power, built by the Putnam Machine Co., of Fitchburg, Mass., and a fine boiler, 30 horse-power, built by R. W. Pratt & Co., of Boston, drive their machinery. This firm have an office and sales room at No. 80 Commercial street. Do a business amounting to $275,000 per annum.

WILLIAM P. HASTINGS commenced the manufacture of organs and melodeons in 1850. He occupies a two and one-half story wooden building, 30 x 24 feet, located at No. 15 Chestnut street, has eight employees, and produces about 150 instruments per year, doing business to the amount of $15,000.

BURNHAM & MORRILL, manufacturers of horticultural sealed fish, fruits and vegetables, are located at 614 Commercial street, employ in the busy seasons 100 hands, and pack annually about 600,000 cans of corn and lobsters, including a large quantity of fruits, vegetables, etc. The business was established by George Burnham in 1848, and has been carried on by the present firm since 1865.

H. M. NOYES & CO., occupy a room, 30 x 25 feet, in a four story brick building located at No. 15 Union street. They commenced business in 1866, have four employees, and manufacture steam engines, shafting and general machinery. Their motive power is derived from a 60 horse-power engine of their own manufacture, and a tubular boiler, 40 horse-power, built by Charles Staples & Son, of this city.

HARPER & SMITH occupy a room 30 x 45 feet, in a two story wooden building located at No. 7 Commercial street, for the manufacture of lasts and patterns. They commenced business in 1863, employ six persons, and turn out annually about 25,000 pairs of lasts.

J. L. SHAW & CO. occupy two floors, 50 x 30 feet each, in a three story brick building located at the corner of Fore and Market streets, for the manufacture of engine hose, leather belting, and military equipments. Commenced business in 1862, and have three employees.

THE FOREST CITY LEAD CO., manufacturers of white leads and colors, occupy a three story brick building, 50 x 30 feet, located at 104 and 106 Fore street. They began business in 1868 and have five employees. Have a capacity for grinding 1,000 pounds of lead per day. A Roper fire air engine of 7 horse power drives their machinery.

DURAN & BRADBURY commenced business in 1865, and have fifteen employees. They occupy a three story brick building, 30 x 24 feet, located at 171 Middle street, and manufacture trunks, valises, traveling bags, etc., doing business to the amount of $30,000 per annum.

D. WHITE & SON, occupy about 75,000 square feet of room located at 105 Federal street, for the manufacture of every description of baskets. The business was established in 1858, and gives employment to thirty persons. This firm have an office and salesroom at No. 9 Market Square, also have an office and salesroom in Boston, at 27 Exchange street.

SMALL & KNIGHT occupy two floors, 30 x 25 feet, in a one story brick building located at No. 15 Market Square, for the manufacture of organs and melodeons. Commenced business in 1865, and have five employees.

J. M. KIMBALL & CO., manufacturers of carriages and sleighs of every description, occupy about 10,000 square feet of floating located at No. 304 Congress street. This firm commenced business in 1858, have fifty employees, and turn out annually about 500 carriages and sleighs, doing business of $100,000. They have a salesroom at 110 and 112 Sudbury street, Boston, Mass.

H. B. & H. N. HART, occupy two three story wooden buildings, 70 x 28 feet, used as coast houses, also occupy a tannery 120 x 50 feet, located on the north side of Portland street, and manufacture sheep skins, etc., turning out about 1,000 skins per week, doing business to the amount of $75,000 per annum. They commenced business in 1862, and have seventy employees. Their machinery is driven by an engine of 15 horse-power, with a tubular boiler, 25 horse power, which, in addition to furnishing steam for the engine, heats all the buildings. Office and salesroom No. 15 Portland street.

REBLON & SIMMS occupy the upper floor of a two story wooden building, 30 x 30 feet, located at 24 Preble street, and manufacture houses and brushes, of which they produce about 150 doors per week, containing 1½ tons of boring-tons and doing business to the amount of $20,000. This firm commenced business in 1864, and have six employees.

E. K. LEMONT, manufacturer of light carriages and sleighs, commenced business in 1851. He occupies a three story wooden building, 30 x 120 feet, situated at 22 Preble street, and employs twenty persons, who turn out annually about fifty carriages and four hundred sleighs. Does business to the amount of $60,000.

QUINN & COMPANY, manufacturers of emotional, tubular, fine and cylinder bottles, and sleigh water tanks, occupy a two story wooden building, 30 x 41, located at No. 8 Frank

WM. P. HASTINGS,

MANUFACTURER OF

Organs and Melodeons,

AND DEALER IN PIANO-FORTES.

15 Chestnut Street . . . . . PORTLAND, ME.

lin street. The business was established by Quinn & Delano, in 1862, and now gives employment to thirty hands. Their machinery is driven by an engine of 6 horse-power, with one upright tubular boiler, 7 horse-power, both of their own manufacture. This firm also give special attention to the repairing of steamboats and boilers, and are prepared to execute all orders promptly and faithfully.

The Portland Stone Ware Co., located at the north end of Deering's bridge, occupy about two acres of ground on which is located a four story wooden building, 120 x 50 feet, where is manufactured everything capable of being moulded from clay, from a small soap dish to a ten gallon butter crock or a twenty gallon water keg. They also occupy a four story wooden building, 50 x 40 feet, used for the manufacture of drain tile and vitrified stone, sewer and drain pipe, of great utility and extensive scale; also occupy a two story brick building, 100 x 40 feet used for storage purposes, etc. The wares made by this company are subjected to twice the amount of heat required to flux iron, and great care is taken by the burner in giving it the right temperature of heat. After being allowed to cool it is coated inside and out with an enamel glaze which is proof against injury from acids, fluids or gases. The business was established in 1848, by J. T. Winslow, and became an incorporated company in 1866, with a capital of $100,000. This company employ fifty hands, turning out annually about $50,000 worth of stone ware, and have facilities for producing five hundred thousand feet of drain pipe. Their machinery is driven by an engine of 50 horse-power, built by Daniel Winslow & Son, of Portland, with a Harrison patent steam boiler of 25 horse power, built by Joseph Harrison Jr., of Philadelphia, Penn. J. N. Winslow is Treasurer, and J. T. Winslow, Superintendent of this company.

C. A. Donnell occupies a three story brick building, 45x30 feet, located at No. 118 Fore street, for the manufacture of all kinds of brass and composition castings, ships' castings and trimmings, water closets, force pumps, etc. Commenced business in 1852, and has five employees. Runs an engine of 5 horse-power, built by Winslow & Son, of Portland, with an upright flue boiler, 6 horse-power, built by Quinn & Co., of Portland. Turns out about six hundred pounds of castings per month. Mr. Donnell was awarded a premium by the Maine Agricultural Society for brass work exhibited by him at their fair in 1856.

C. Staples & Son occupy a two story brick building, 115 x 40 feet, used as a pattern and machine shop, a two story brick building 70 x 40 feet, used as a boiler shop, and a foundry 80 x 80 feet, the whole covering an area of 56,000 square feet, and located on Commercial and York streets, for the manufacture of castings of every description, steam engines, boilers, shafting, mill gearing, water wheels, bank, house and fire-proof safes, etc. The business was established by Charles Staples about 1818. This firm have one hundred employees, and turn out about sixty tons of castings per month. They have in process of construction two marine boilers weighing 28 tons each, to be used on the steamer New York, running on the St. Johns line. Their machinery consisting of lathes, planers, drills, milling machines, etc., is driven by two engines of 60 horse-power combined, with a horizontal tubular boiler of 70 horse-power, each of their own manufacture. Do business amounting to $150,000 per annum. Charles Staples, Charles Staples, Jr., George L. Damon compose the firm.

The Casco Brewery, J. & P. McClinchy, proprietors, occupy a two story wooden building, 60 x 40 feet, with an ell 140 x 35 feet, located on Fore street, for the manufacture of ale, of which they turn out about three hundred barrels per month. Commenced business in 1859, and have nine employees. Run an engine of 8 horse-power, with an upright boiler, 10 horse-power, built by the Portland Company, of Portland. Do business amounting to $30,000 per annum.

The Eagle Sugar Refinery. Incorporated in 1867. Capital $250,000. Occupy a four story brick building 100 x 50 feet, with an ell used as an engine and boiler room, 50 x 35 feet; also a one story brick store house 80 x 65 feet, with cooper's shop, barrel warehouse, etc., located on Fore street, near the foot of Mountfort, for the manufacture of all grades of yellow and coffee sugars, and giving employment to forty-five hands. This company have two vacuum pans used in the boiling of molasses, with a capacity of boiling seventy hogsheads per day. Their machinery is driven by three steam engines of 75 horse-power combined, one of which was built by Merrick & Sons, of Philadelphia, Penn., and the others by the Portland Company, of Portland, with two tubular boilers, 75 horse-power, one built by the Portland Company, and the other by Quinn & Co., of Portland. John Sparrow is president and manager, Peleg Barker, treasurer, and Lynch, Barker & Co., agents of this company, who do business amounting to about $1,000,000 per annum.

Leathe & Gore occupy a three story brick building, 160 x 26 feet, located at 397 Commercial street, opposite the Portland and Kennebec depot, for the manufacture of steam refined bar soaps of all grades, employing four hands. The business was established by John D. Leathe, at Lowell, in 1842, and afterwards changed to the present style of firm, who commenced business in Portland in 1852, being the first bar soap manufacturers in Maine. This firm turn out eight tons of soap per week, consuming about three tons of tallow and grease. Their machinery is driven by an engine of 25 horse-power, with boiler attached, built by Joseph Harrison of Philadelphia, Penn. Do business of upwards of $60,000 per annum. They are also sole agents for the State of Maine of the Harrison patent steam boiler.

A. F. Fuller occupies a two story brick building 60 x 20 feet; also a one story wooden building, 15 x 15 feet, located on Congress street, at the crossing of the Portland and Kennebec railroad, for the manufacture of all kinds of varnishes and Japans, and paraffine and machinery oils. Commenced business in 1834, and employs six hands, doing business to the amount of $100,000 per annum. Office and salesroom, 208 Fore street.

C. E. Stevens, occupies a foundry 80 x 50 feet, located in the rear of No. 9 Union street, for the manufacture of every description of iron castings. Commenced business in 1868, and employs 5 hands. Power furnished from an engine in building adjacent.

C. H. Breed & Co. occupy a three-story brick building, 60 x 23 feet; also, two rooms 60 x 23 feet, in an adjacent building, located at Nos. 42 and 44 Union street, for the man-

C. A. DONNELL,

Brass Founder,

AND MANUFACTURER OF

SHIP CASTINGS AND TRIMMINGS

OF EVERY DESCRIPTION.

PORTS, WATER CLOSETS, FORCE PUMPS, &c.

All kinds of Brass and Composition Castings made to order.

HOUSE, SHIP AND STEAMBOAT PLUMBING.

NO. 118 FORE STREET. . . . PORTLAND, Maine.

QUINN & COMPANY,

MANUFACTURERS OF

Steamboat, Locomotive Tubular and Upright Tubular,

Flue and Cylinder

BOILERS,

AND

SHIPS WATER TANKS,

Old Boilers bought and sold or Exchanged for new. Special attention paid to Steamboat Repairs.

NO. 6 FRANKLIN STREET, PORTLAND, ME.

JAMES QUINN. GEO. H. COYLE.

[illegible] of ladies', misses' and children's hand and machine sewed boots and shoes. The business was established by Brand & Tukey in 1856, and carried on by the present proprietors since July, 1866. This firm have 125 employees and turn out about 100,000 pairs per annum, doing business to the amount of $325,000.

R. J. D. Larrabee & Co. occupy a two story wooden building 80 x 32 feet, also a dry-house 80 x 80 feet, two stories and built of brick, located on West Commercial street for sawing and planing purposes, and for the manufacture of house and picture frame mouldings. Commenced business in December, 1869. Have 30 employees and turn out about 10,000 feet of mouldings per week, doing business to the amount of $35,000 per annum. Their machinery is driven by an engine of thirty-five horse-power, with two fire boilers 60 horse-power combined. This firm have an office and salesroom on Plum street.

The Portland Glass Co. Incorporated in 1862. Capital $150,000, occupy a [illegible] brick building 200 x 50 feet, with an ell, itself on a [illegible] room, 120 x 70 feet, located on West Commercial street, for the manufacture of glass ware of every description, giving employment to 125 hands. Their machinery is driven by an engine of twelve horse-power built by Wandlow & Co., of Portland, Maine, with one cylinder boiler, built by same firm, which is additive to supplying steam for the engine [illegible] all the buildings. This company have a sample room in Boston, at No. 16 Congress street; also, one in New York, at No. 35 Murray street.

The Portland Packing Co. occupy a three story brick building 84 x 27 feet, and a three story wooden building 45 x 80 feet, located on Franklin street; also have three factories located in the town of Westbrook, Maine, for the manufacture of hermetically sealed fruits and provisions. This firm commenced business in January, 1868, and have 25 employees.

Tyler, Lamb & Co. occupy a four story brick building, 45 x 65 feet, located at Nos. 47 and 49 Union street, for the manufacture of men's, boys', youths', ladies', misses' and children's boots and shoes. Commenced business in 1864, and have 150 employees; turn out about 12,000 pairs of thick and calf boots and 60,000 pairs of serge, gum and kid boots, doing business to the amount of $250,000 per annum. Run an engine of six horse-power, built by H. M. Nason & Co., of Portland, Maine.

The Forest City Mill. G. W. Stimpson, proprietor, occupy two floors, 60 x 25 feet, of four story brick building located at No. 13 Union street, for the manufacture of coffee and spices, employing six hands. The business was established in 1855 by J. Grant, and has been carried on by the present proprietor, since Jan. 4, 1868.

C. M. & H. T. Plummer occupy a two story wooden building 75 x 50 feet; also a blacksmiths' shop 100 x 25 feet, located at Nos. 11, 13 and 15 Union street, for the manufacture of mines and gas fittings, iron railings, shutters, gratings, pumps, &c. Commenced business in 1856, and have twenty employees. Their machinery is driven by an engine of fourteen horse-power with one tubular boiler attached, built by the Swanwood Machine Co., of South New Market, N. H.

W. G. Norris occupies a room 80 x 40 feet in a three story brick building, located at No. 40 Union street, for the manufacture of ladies, misses, and children's sewed boots and shoes. Commenced business in October, 1867. Have 50 employees, and turn out about 45,000 pairs per year, doing business to the amount of $[illegible].

Morrison & Stevens occupy a room 40 x 23 in a two story wooden building located at the foot of Cross street, for the manufacture of packing boxes. Commenced business in 1868; have six employees and turn out about 600 boxes per week. Their machinery is driven by an engine of 40 horse power in a building adjacent. Do business of $10,000 per annum.

Size & Nevins occupy a room 50 x 40 feet in a two story brick building, located at the foot of York street, for the manufacture of coffee and spices. Commenced business in 1867; have five employees; grind about 1,500 pounds of coffee and 1,500 pounds of spices per week, doing business to the amount of $40,000 per annum. Their machinery is driven by an engine of 60 horse power in a building adjacent. This firm have an office and salesroom at 178 Fore street.

L. J. Hill & Co., occupy two stores 45 x 22 feet each, in a two story brick building located at Nos. 240 and 242 Fore street, for the manufacture of coffee and spices. Commenced business in 1866; have four employees; grind about 800 pounds of coffee and 400 pounds of spices per week; doing business to the amount of $48,000 per annum. Their machinery is driven by an engine of forty horse power in a building adjacent.

Rufus Dunham, occupies a four story brick building 60 x 30 feet, located at No. 218 Fore street, for the manufacture of britannia and plated-ware. Commenced business in 1826; have 25 employees; runs an engine of ten horse power, with one cylinder boiler 20 horse power, built by S. E. Chubbuck & Sons of Boston, Mass. Does business to the amount of $80,000 per annum.

J. S. Ricker & Co. This firm was established in the year 1853, under the style of J. S. Ricker, for the manufacture of belt, card, strap, wax, and sole leather, and continued until the year 1865, when it was changed to the style and firm of J. S. Ricker & Co.

The buildings cover an area of about one acre; number of hands employed, thirty; amount of business done per annum, $150,000; engine is thirty horse power of Portland Company Works make. They manufacture fourteen thousand sides of union sole leather; six thousand sides of wax leather; six hundred and fifty backs for belt leather, and six thousand calfskins per annum.

J. W. Stockwell & Co. established business in December, 1866. They occupy two buildings, 25 x 60 and 20 x 90 feet respectively, for the manufacture of cement drain and sewer pipe, in sizes from three to twenty-four inch. Use 16 of Dayton's patent drain-pipe machines, and consume about 2,000 barrels best hydraulic cement per annum. These pipes have been in constant use for thirty years and over, and it is claimed that they become harder as they increase in age.

The Portland Rolling Mills is a corporation having its principal office in Portland, but its works are situated at Ligonia village, so called, in Cape Elizabeth, about half a mile from Portland. The company was incorporated in 1865, but the manufacture of rails only commenced in July, 1867. The only business carried on is the manufacture and re-rolling of iron rails. About 160 men are employed, and 1,000 tons of rails are made annually. There are ten puddling and heating furnaces, one large engine and three smaller ones. The company has over eighty acres of land, well situated for manufacturing purposes, a pond of seven acres in extent of pure water, which supplies all that is required for the engines and rolls, and could supply a large number of other kinds of manufactures. The works of the company are connected with the broad and narrow gauge roads of New England by a railroad track connecting with the Portland & Kennebec Railroad, and as they are situated on tide waters, vessels drawing fourteen feet can come directly to the works and discharge and receive cargoes. The engines and machinery were made by the Portland Company. There are one large and three small engines, with about 400 horse-power in all. About 3,500 tons pig iron, 10,000 tons of coal and 8,000 tons old rails are consumed annually. Principal office, 196 Fore street.

H. B. & H. M. Hart established business in 1837. They occupy a factory building 40 x 100 feet, three stories, and two three-story buildings adjoining, 28 x 70 feet each, for wool pulling and tanning, and the manufacture of pebbles, kid, linings and real skins. Employ 18 hands, and produce from sixty-five to eighty thousand skins per annum. Their motive power is derived from an upright engine of ten horse-power.

The Forest City Sugar Refining Co. was organized in 1866, for the refining of sugars, turning out crushed, powdered, granulated, with all grades of coffee sugars. The buildings occupied are of brick. Furnish employment to some 75 men.

Lisk & Weston. In August, 1868, this firm commenced erecting a flour mill 40 x 77 feet, four stories. This mill they intend will be running in July, 1869. Will have six run of burrs, capable of producing 300 barrels per day.

J. Winslow Jones, manufacturer of Winslow's green corn, has been in the above business twenty years, being successor to Nathan Winslow & Co., succeeding that firm in 1859. He also packs lobster and salmon. Has factories at Westbrook, Bridgton, Yarmouth and Kendall's Mills, and is now building one at Farmington, the terminus of the Androscoggin railroad; all of the above are for preparing green corn. He has another factory at Melbridge for packing lobsters. His largest factory is at Westbrook, covering about 15,000 square feet, and capable of turning out 600,000 cans of corn during the packing season, which lasts five or six weeks. During this time he employs about 300 persons. Has special machinery for making cans and cutting off corn. A twelve horse power engine supplies the power. The buildings are from one and a half to three stories high. The factory at Bridgton is nearly equal in capacity to the one at Westbrook. The factories in Yarmouth, Kendall's Mills and Farmington are about one-third the size of the one at Westbrook, above described. The packing season commences about August 15th and lasts till October 1st.

In 1868 Portland shipped to Cuban ports 657,303 box shooks, 158,611 hogshead shooks, 2,655 M. hoops, 3,837,840 feet of lumber, and 14,742 casks. These figures show a slight gain over the shipments of 1867, but a considerable falling off from 1865 and '66. The imports from Cuba included 54,510 hhds. molasses and 10,518 hhds. and 16,800 boxes of sugar, against 40,473 hhds molasses and 6,492 hhds. and 2,855 boxes of sugar in 1867.

The trade of Portland shows a large increase. The duties collected in ten months of 1868 were $901,542, against $767,811 in the same period of 1867. The molasses trade has increased five fold. In October, 1868, the amount of this article withdrawn from bond for home consumption, was 8,649 hhds., 1,298 trcs. and 436 bbls., comprising 1,177,237 gallons, which paid a duty of $94,178.96 in gold.

There were 2,311,572 feet of lumber imported in 1867, and 14,215,928 exported, making the amount of domestic lumber 11,904,356 feet. This does not include a large amount of sugar box shooks, piles, scantling, &c. The amount of foreign lumber imported for the eleven months of 1868, ending December 1st, was 5,123,867 feet; exported, 5,160,894 feet.

POWNAL, 45 miles S. W. from Augusta and 1[illegible] N. from Portland, a station and town on the Grand Trunk Railroad.

Pownal has two powers: First, "Haskell's Mills," on the [illegible] branch of Royal's river, near Pownal Centre; fall, with a dam [illegible] feet high, [illegible]. Saw mill and grist mill; dam out of repair; machinery old-fashioned and poor; power sufficient to run both mills all the year, with improved machinery and good dam. [illegible]

Second, "Merrill's Mills," on the [illegible] branch of Royal's river, near north Pownal village; a saw mill might run the year round with good dam and modern machinery. Height of fall with a dam [illegible] feet high, [illegible]; ponds the water back about two miles; formerly a grist mill upon it.

READFIELD, 60 miles from Portland, and 7[illegible] from Bangor, a station and town on the Maine Central. [illegible]

[illegible]

RICHMOND, 46 miles from Portland and [illegible] from Skowhegan. A village and town on the west bank of the Kennebec river and on the Portland and Kennebec railroad. [illegible] The village has four churches and two banks.

Richmond derived its name from Fort Richmond, a [illegible] place of defense from the Indians, built in 17[illegible] near what is now the village of Richmond. [illegible] in the defense against the Indians till 17[illegible], when it was dismantled. The plantation of Richmond was incorporated under the name of Bowdoinham as a town in 17[illegible], from which the present town of Richmond was taken and incorporated Feb. 10th, 18[illegible].

In 18[illegible] the valuation was $1,212,[illegible]. [illegible]

[illegible]

Richmond has two powers: First, on [illegible] river; [illegible]

Second, on Mill brook; [illegible]

[illegible]

SABBATTISVILLE, 1[illegible] miles from Lewiston and [illegible] from Portland, a [illegible] station on the Androscoggin Railroad. [illegible]

[illegible]

[illegible] The mill is run by an engine of [illegible] horse power.

SACCARAPPA, (see also Westbrook.) The village of Saccarappa, [illegible] is situated in the town of Westbrook, Cumberland county, Maine, [illegible] miles from Portland, on the Portland and Rochester railroad and proposed route of the Portland and Ogdensburgh, and the Presumpscot river, [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

brush wire. They employ twelve men. Use water power to drive their machinery.

SACO, a city of about 8,000 inhabitants is located on the northeastern side of the Saco river, and was formerly called Pepperellborough until 1805, when it was changed to Saco. It was made a city in 1867. There are eight churches here as follows: 1 baptist, 1 free-will baptist, 1 christian baptist, 1 congregational, 1 episcopalian, 1 unitarian, 1 methodist, and 1 union church which society hold meetings in a hall. The valuation of real estate in 1866 was $2,107,485; personal estate $1,250,975; total $3,358,460; rate of taxation $2,20 per hundred dollars. There are twenty-three schools, of which 1 is a high, 1 grammar, 3 intermediate, 7 primary, and 11 are mixed: the number of children attending schools in 1868 was 1,934. There are two banks here, the Saco National, and the York National; also a savings bank, Saco and Biddeford Savings Bank, incorporated Feb. 1827, and one insurance company. Number of polls 1,450. The number of men in the United States service from this place was 901.

Old Orchard which is situated about four miles from the city of Saco, is much noted as a summer resort; has a beautiful beach and during the summer months patronized by crowds of people from all parts of the country; the beach is about seven miles long, and the tide runs out so as to give a wide hard beach which at low water affords a splendid drive for pleasure parties, which is improved by all classes during the warm summer months. The drives in the vicinity are also truly delightful. There are several hotels besides a number of private houses for the accommodation of travellers.

Saco enjoys the rare privilege of possessing a great hydraulic power united with navigable accommodations. The Saco river terminates its fantastic course at this place by leaping, within a short distance, forty-two feet, and mingling with the ocean. The water power is very valuable. From the mouth of the river a fine beach extends to the east about three miles, called Orchard beach, noted above. This name arose from a growth of apple trees formerly near the beach, planted at a very early period; some of them remained as late as 1770. The small streams by which different parts of Saco are watered, generally derive their origin from an immense bog, commonly called the Heath, and flow into the river and sea. Saco and Biddeford were formerly united. The former was first settled in 1631, the latter in 1630.

York Manufacturing Co. Incorporated in 1831. Samuel Batchelder, President, H. Temple, Treasurer. I. H. Foss, Agent. This company manufactures denims, stripes, ticks, heavy cottonades, light checks and dress goods. Their works are located on Factory Island, consisting of four mills, 200 x 50, five stories each, built of brick, with out-buildings, storehouses, etc. Have 800 employees, turn out 100,000 yards per week, consuming about 100 bales cotton. The mills contain 30,000 spindles, and 700 looms, driven by two turbine and two breast wheels.

Littlefield & Fowle, commenced business in 1854, as manufacturers of carriages and sleighs. Occupy a three story frame building, 118 x 48 feet, situated at No. 126 Main street. Employ twelve hands, doing a business of $15,000 per annum. This firm also have a mill, three stories, 40x20 feet, located on Pepperell Square, for sawing out carriage stock and for the manufacture of wheels. Machinery driven by power furnished from a Reynolds turbine water wheel of 15 horse-power.

Wallace Bros. & Co. occupy a three story frame building, 75 x 35 feet, ell 50 x 25 feet; also a store house, 50 x 30, feet, two stories, engine and boiler house, 30 x 20 feet, two stories, located on Market street, where they manufacture belt and all kinds of upper leathers. Commenced business in 1865. This firm do a business of $40,000 per annum. Employ twelve hands. The power for driving machinery is furnished from a 20 horse-power engine, made by the Swamscot Machine Co., South Newmarket, N. H. Steam from one flue and one tubular boiler, also made at South Newmarket by the Swamscot Machine Co.

F. Stone commenced business in 1853. Manufacturer of sleighs and wagons. Occupy a two story frame building, 30 x 22 feet, situated on Temple street, No. 13. Attached is the smith shop and varnish room, 26 x 20 feet. Employs four hands, doing a business of $5,000 per year.

Joseph Hobson commenced business in 1848 for the manufacture of and dealing in sugar box shooks, headings, and lumber, occupying four mills, each about 45 feet long by 80 feet wide, situated in this city and Biddeford. He employs all the year round 150 hands, and produces 15,000,000 feet long and 5,000,000 feet short lumber, doing a business of $300,000 per year. Two of his mills are driven by steam power of about 100 horse each, the other two by water. He has offices at No. 1 Spring's Island, this city, and 292 Commercial street, Portland, head of Hobson's wharf.

O. B. Chadbourne, No. 14 Temple street. Mr. C. has been engaged in the manufacture of light carriages, express wagons and sleighs since 1840. In 1863 he was burnt out, but immediately erected a building, with wings, equal to 140 feet in length by 28 feet wide, two stories high. Employs eighteen hands, and gets out about 100 carriages and 75 sleighs per annum. His productions are mostly shipped to Wm. P. Sargent, of Boston.

SACO RIVER, 18 miles from Portland, the terminus of the Portland and Rochester railroad.

S. H. Berry & Son occupy a two story wooden building 60 x 26 feet, and another 30 x 40 feet, one story. The business was established by S. H. Berry in June, 1833. This firm are manufacturers of sugar and molasses heads and sugar box shooks, for the Cuba market. Also manufacture small packing boxes for boots and shoes, and for putting up preserved fruits, meats, &c., employing when in full operation, 25 persons. Their machinery consists of gang and single saws, box and heading machines, &c.; is driven by a water wheel of 80 horse-power, which power can be trebled if desired. Post Office address, Bar Mills, Maine.

SCARBOROUGH, (Oak Hill,) 6 miles from Portland, 46 from Portsmouth, and 102 from Boston. A country station, containing one church, situated in a town by the same name. This town contains 30,634 acres of land, and is principally an agricultural town, for which purpose it furnishes some rich soil and has a large quantity of salt marsh. Nonsuck river passes through the whole length of the town. This town has the honor of being the birth place of the distinguished statesman, Rufus King and his half brother, William King, the first governor of Maine.

Scarborough has two powers. First, a saw mill privilege with a small volume of water. Will operate only in wet times. Situated near the post road.

Second, an unoccupied privilege on the Dr. Milliken farm; of its capacity we have no knowledge other than it is small.

SEVEN MILE BROOK, 70 miles from Portland and 30 from Skowhegan. A flag station on the Portland and Kennebeck Railroad, situated on the Kennebec river.

SKOWHEGAN, 100 miles from Portland, 210 to Boston, 43½ from Farmington, 200 from Quebec, and 80 from Moose Head Lake. A village containing 4 churches, 2 national banks, 1 public hall, and 3 hotels. "Stop at Brewster's." This village has grown in twenty years from three houses to a place of about 4,000 inhabitants. Surrounded by a rich farming country and the terminus of the Portland and Kennebec Railroad, it is the market for the country adjacent.

Skowhegan has four powers; first, "Skowhegan Falls," on the Kennebec river, which, at this point, is divided into two channels by an island.

Total fall twenty-eight feet in half a mile. The height may be increased by dams. A considerable proportion of the fall is perpendicular. The sides and bottom of the stream are solid ledge, affording firm foundations for dams, which are also supported by the island as a natural pier, and by projecting masses of rock upon the brink of the fall.

The lay of the land, about the falls, is only moderately favorable for the location of mills; many of the sites, however, are, in their natural state, good; and room for all structures that may be needed for the use of all the power, can be secured by canals or by shafting. The rock is suitable for dams, foundations and other coarse work.

No measurement of the volume of water, or careful estimate of the power, has ever been made. If the mean amount can be assumed to be thirty-eight per cent. less than at Augusta, or 118,810 cubic feet per minute, that would yield on a twenty-eight feet fall, 6,000 horse-powers gross measurement, that at Augusta being, by the same measurement, about 5,000 horse-powers. It is evident that any improvement of the lakes above, for reservoir purposes, now in contemplation by the Augusta Corporation, will react as favorable upon the power at Skowhegan as the power at Augusta.

The dam on the falls is constructed across the north channel, (the river at this point runs east and west,) from the island to the north bank.

The mills on the island are all on a natural canal, through the upper end of the island, and emptying below the falls. These privileges are very desirable and safe from freshets, and contain a large amount of power which can be used like that on the south side, by shafting running inland.

The dam, from the north shore, near the flour mill, to the island, is built on ledge bottom all the way, it being a natural fall, and is very cheaply built and very safe, as the ledge comes to the top of the dam in several places, and in the middle is a large natural pier which is all covered at high water and logs float over it. This dam is at the head of the canal which turns the water down the south side of the island, at the foot of which is another dam crossing to the south shore, with a gateway regulating the water from the south shore by a side dam and wall.

The power at "Skowhegan Falls" is a very valuable and desirable one, as it has the whole water of the Kennebec river at this place, and is capable of being largely improved and increased by raising dams, building canals, &c. The bed of the river and shores are all ledge around the falls, and dams and other structures can be cheaply and permanently built.

The machinery run on the power, probably occupies about half of the amount of water now available, which could be largely increased by canals and tightening the dam.

The manufactories employ a large number of hands, male and female, and thereby increase the business and wealth of the place. This is also the centre of all the country of the upper Somerset county and a part of Franklin and Piscataquis counties, has a large business in the wholesale as well as retail trade, and all of such business created by manufacturing and farming must necessarily centre here, this being the only outlet for this large and productive farming country.

Second, third and fourth, on the Wesserunsett stream; occupied, one by a tannery, and one by two saw mills which operate fall and spring; these will run small machinery all the year.

The extent and value of the manufactures are as follows:

E. A. [illegible] manufactures [illegible], commencing in 1866. Employs two men and does a business of $4,000 yearly.

W. C. Hennigton & Co. occupy one room 40x80, for the manufactory of water-wheels, commencing in 1868. They employ five persons.

R. Wright commenced the manufacture of axes in 1866, occupies one floor. Employs one person and produces 30 axes daily; doing a business of $20,000 annually.

Steward, Williams & Co. are the largest manufacturers of axes and edge tools here. They occupy four buildings, commencing in 1860; employ 24 persons, consume 100 tons steel and iron 300 pounds of iron daily, and 60 tons of grindstone annually, producing 200 axes, besides other edge tools, daily. A five feet Gould wheel supplies the power, the fall is 12 feet. They transact goods west and south from "away down east," and do a business of $80,000 annually.

C. M. Bailey occupies three buildings, two of them 120 x 50 feet, stories each; the other 75 x 40, two stories, for the manufacture of oil cloths. Commencing here in 1866. The business was established some 20 years ago, at Winthrop. He employs here 45 men, producing 10,000 yards per week. He also has two large establishments at Winthrop, and one at East Winthrop, where he employs 100 men and produces 20,000 yards per week, mostly heavy work. The wear from three-quarters to eight-quarters wide. When he first commenced, years ago, he manufactured window shades and table covers. He does a very large business, exceeding a million of dollars annually.

R. E. Lane & Co. occupy one mill for the manufacture of book and newspaper, commencing in 1861. They employ twelve persons, run four engines, and one cylinder machine, producing 1000 pounds daily.

Situated on the Island in this place is the machine shop and iron foundry of S. L. Gould & Co. Their buildings consist of a new and substantial brick building, 150 feet long by 40 wide, and is divided by a brick partition wall, occupying one half for a machine shop, and the other half for an iron and brass foundry. Connected therewith, is a building 40 x 50 feet, used as a pattern shop and for storing plows, harrows, cultivators and doing other work connected with their business.

Mr. Simon L. Gould, of this firm, is the inventor of the wheel so extensively and favorably known as the Gould water wheel, the merits of which are now fully and successfully established in this vicinity.

The business of this firm is the manufactory of water wheels, improved circular saw mills, shingle machines, wood turning lathes, shafting, gear, screws, jig saws, and all kinds of mill and job work. They also manufacture plows, horse hoes, cultivators, and the various agricultural implements of this description. They are owners of the Burns patent horse-hoe, which is giving the best of satisfaction and attracting the very general attention of the farmers in this vicinity. We are inclined to believe this hoe has merits that will bring it into general use throughout the country. They have an ample water power, using a Gould wheel, and are very safely situated, built of brick is fire and freshet.

Situated on the corner of Mill and Main streets is what is known as the "Excelsior Building," owned by M. Weston. This building is 40 x 100 feet, four floors. It is used for grinding mills for paints and [illegible] purposes. About one

thousand tons a year of this material is ground at this mill, and used mostly for the body paint to oil cloth carpets. Mr. Willis also has a planing mill, and does all kinds of work usually done in a mill of this description. Also manufactures barrel heads. A part of the building is used for making water wheels and all kinds of millwright work. Here also are made doors, sash and blinds, all kinds of job turning, beside a large business at making croquet sets for the Boston market. The power for all of this work is furnished by a Gould water wheel, five feet in diameter, furnishing ample power in the dryest season. Mr. Willis is also the partner of S. L. Gould in the iron foundry and machine shop in this place.

SOMERSET MILLS, 87 miles from Portland and 13 from Skowhegan, a country station on the Portland and Kennebec Railroad.

SOUTH BERWICK, 2 miles from Brock's crossing, 24 miles from Union village, a village and town on the Portsmouth, Great Falls and Conway Railroad. The village contains four churches, one National and one savings bank and a public academy for males and females. The population of the village is about 1,000, of the town, 2,800. There are thirteen district schools in the town, besides the Berwick Academy. No. of voters, 600. The town was incorporated in 1814.

South Berwick has three powers. First, "Quamphegan Falls," on the Salmon Falls river, which here meets the tide-waters of the Piscataqua.

These falls are owned and occupied by the Portsmouth Company.

Second, "Newichawanick Falls," on Great Works river, about a mile above its conflux with the Salmon Falls river. The total height of the fall is sixty feet; the descent is divided into three pitches by as many dams; upon these are two woolen mills and one saw mill.

The power is reckoned equal to 600 horse. The supply of water is ordinarily good. The river is connected with several small ponds. Privilege and improvements owned by the Newichawanick Company. The power is not all used.

Third, at the junction of the Great Works and Salmon Falls river, "Yeaton's Mills;" dam seventeen feet high; saw mill, grist mill, plaster mill; power estimated at 250 horse. Power used only in part and superior facilities for further improvements.

The above privileges are situated in close proximity to the Boston and Maine, Portland, Saco and Portsmouth, and the Great Falls and Conway Railroads, and have accordingly superior facilities for transportation.

Newichawanick Co. were incorporated and established in 1855, for the purpose of manufacturing repellants, blankets and kerseys. They occupy buildings of the following sizes: one brick mill 5 stories high, 48 x 90 feet, and one brick and frame mill 38 x 90 feet, 3 stories high. The first contains six sets of cards, and the latter one four sets. They employ 175 hands, and use water power, three draws, having a fall of 65 feet in all. G. H. Burleigh, agent and treasurer.

Wm. A. McIntire, commenced business in 1848, for the manufacture of sash, doors, blinds, shingles, &c., &c. He occupies a mill building 30 x 50 feet, two stories; store house 60 x 25, two stories; paint shop 24 x 42, 1½ stories, situated opposite the Salmon Falls Co's. mill, of Salmon Falls, N. H. Employs on an average ten hands. His machinery is driven by an overshot wheel of fifteen horse-power having 34 head of fall.

STEWARD, WILLIAMS & CO.,

MANUFACTURERS OF

EDGE TOOLS, &c.,

FROM THE BEST

Double Refined Cast Steel

AND

Norway Iron.

S. W. Steward,
R. Williams,
J. L. Allen,
} SKOWHEGAN, Me.

Portsmouth Company. The works of the Portsmouth Company in South Berwick are situated on the Salmon Falls river, which here meets the tide water of the Piscataqua, 10 miles from Portsmouth, N. H. The works of the company, besides other necessary buildings, consist of a four-story brick cotton mill with an attic, containing about 8,500 spindles and 220 looms; using about 1,500 bales of cotton, and turn out annually about 2,500,000 yards of four-quarter cotton sheetings. The works are driven by the Reynold iron turbine water wheels, which give good satisfaction.

This company was incorporated in 1831, and the factory erected and put in operation in 1832, since which time the hydraulic power of the company has been greatly enlarged by the erection of a substantial dam, much higher than the old dam, and 225 feet in length; giving a head and fall of 19 feet above high water mark in the Piscataqua river at ordinary high tide, and affords a surplus power sufficient to drive twenty thousand additional cotton spindles.

This, the main branch of the Piscataqua river, naturally affords a copious supply of water, but its hydraulic power has been immensely augmented by the operations of the Great Falls manufacturing Company on this (the Salmon Falls) river and its branches, by converting into reservoirs several large ponds which discharge into it, and which in the aggregate cover an area of 3,758 acres. These reservoirs may be drawn down, at pleasure, on an average of ten feet, thus insuring an ample supply of water at all seasons of the year.

The works of the Portsmouth Company are situated in close proximity to the Boston & Maine, Portland, Saco & Portsmouth, and the Great Falls & Conway railroads, and consequently have superior facilities for transportation both by land and water. The products of the mill have sometimes been shipped from the cloth room of the company, without drayage, direct to the New York market, by water, cheaper than they could be delivered in Boston by rail.

All the coal, for heating the mills comes by tide water direct to the coal house, without drayage; and the cotton used may be, and has sometimes been, delivered at the cotton house of the company from cotton ports by water, without drayage. Treasurer, Samuel Hale; Superintendent, F. W. Hale. Selling agents.—Messrs. Henry Lilley & Co., New York; Messrs. T. W. & M. Brown & Co., Philadelphia; Messrs. Makepeace & Co., Baltimore.

SO. BERWICK JUNCTION, 48 miles from Portland and 14 from Portsmouth. The Portland, Saco and Portsmouth Railroad and the Boston and Maine Railroad join here. A country station.

SOUTH GARDINER, 51 miles from Portland, and [illegible] from Skowhegan, a flag station in the town of Gardiner, on the Portland and Kennebec Railroad, and the Kennebec river.

SOUTH PARIS, 38 miles S. W. from Augusta and 48 N. by W. from Portland, a station in the town of Paris, on the Grand Trunk. South, West, and North Paris, and Paris, are villages in the town. The town is well watered by the Little Androscoggin, the soil is excellent, but the surface is uneven. Paris is the shire town of Oxford county, and contains six churches, three hotels, a court house, jail and county buildings. It contains 2,827 inhabitants, 614 of whom are voters, and real estate to the amount of $[illegible], and personal estate to the amount of $281,291. It is twelve miles long and six miles wide, and contains four flourishing villages, is a good farming town and well adapted to raising apples. It was settled in 17[illegible] and incorporated in 1793. Rate of taxation, 16 mills on a dollar; poll tax $3.00. The railway station at South Paris is the most important one between Portland and Island Pond. Paris has 1,072 scholars. It also contains Paris Hill Academy.

Paris has twelve powers. First, "South Paris Water-Power," located on Little Androscoggin river. Improvements, one flouring mill, one saw mill, including shingle machine, planer, and machinery for the manufacture of barrels; owned by Charles Bailey & Co.; annual production, estimated 15,000 barrels flour; capacity, 20,000 barrels; now grinding 700 bushels of wheat every twenty-four hours. Saw mill, estimated annual production, 100,000 feet boards, 100,000 shingles, and materials for 12,000 barrels. Power all used, except in periods of high water. A deficiency, usually, in mid-summer.

Second, "West Paris Water-Power," on Little Androscoggin river. Improvements; one flouring mill, owned by Andrews & Dean; annual production, estimated at 7,000 barrels flour.

Third, "Willis' Mills Water-Power," on Little Androscoggin river; a saw and shingle mill, owned by Willis [illegible]; annual production, estimated 75,000 feet of boards and 75,000 shingles.

Fourth, "Barnes' Mill Water-Power," on Little Androscoggin river, three-fourths of a mile south of West Paris station; one saw mill, owned by P. C. Pickett; capacity of annual production, estimated, 100,000 feet of boards.

Fifth, "Snow's Falls Water-Power," on Little Androscoggin river. Improvements; one furniture manufactory, owned by S. L. Howard; capacity, estimated equal to the production of 3,000 barrels flour.

Sixth, "Jackson's Mill Water-Power," located on Little Androscoggin river. Improvements, one saw and grist mill, with shingle machine, and stave mill; owned by J. H. Jackson. Capacity, estimated, equal to annual production of 3,000 barrels of flour.

Seventh, "North Paris Water-Power," located on Moose Pond stream. Improvements, one grist mill, owned by E. W. Murdock; annual production, estimated, 1,000 barrels flour.

Eighth, one-fourth mile below the foregoing, located on Moose Pond stream. Improvements; one saw mill, one shingle mill, owned by Ira Bartlett. Annual production, estimated, at 30,000 feet of boards, and 50,000 shingles.

Ninth, "Iron Foundry Water-Power," located on Stony Brook, near its outlet into the Androscoggin at South Paris. Foundry and machine shop, owned by F. C. Merrill & Co. Capacity, estimated, equal to the production of 400 barrels flour.

Tenth, "Royal's Mill Water-Power," located on Stony brook; one grist mill, one carriage shop, owned by Wm. Royal. Production estimated, 500 barrels flour.

Eleventh, "King's Mill Water-Power," located on Stony brook. Improvements, one saw mill, including shingle machine, and "Dead-Eye" machine, owned by S. M. King. Annual production, estimated, 30,000 feet of boards, and 100,000 shingles.

Twelfth, "Hammond's Mill Water-Power," located on South brook; one saw mill, owned by M. Hammond; annual product, 50,000 feet of boards.

The aggregate annual production of the powers enumerated above, is 25,[illegible] barrels flour; [illegible] feet of boards, 300,000 shingles.

The proportion of forest is estimated at one-sixth, but little old growth forest left. The market connections are at Paris Hill, South Paris, West Paris, North Paris and Snow's Falls; principally at Grand Trunk stations at South Paris and West Paris.

The elevation of Paris Hill above the sea board, as measured by C. L. Jackson, is 831 feet.

WILLIAM B. ROYAL occupies a three-story wooden building, [illegible] x 42 feet; store-house, 40 x 40 feet, carpenter shop, [illegible] x 40 feet, dry-house, 20 x 20 feet, located on Brook street, for the manufacture of canal and railroad barrows. Commenced business in December, 1849. Employs five hands. Machinery is driven by an engine of 15-horse power; also four tilt water-wheels of 20-horse power. Turns out 1,000 barrows, consuming 20,000 feet of lumber and 2½ tons of iron, and these barrows amounting to $25,000 per annum.

S. F. [illegible] occupies a wooden building, 75 x 30 feet, located near the station, for the manufacture of tanned leather. Commenced business in 18[illegible]. Employs one man. Uses 240 hides and 500 calf skins, consuming 25 cords of bark, and does business amounting to $3,000 per annum.

WM. B. ROYAL,

MANUFACTURER OF

CANAL AND RAILROAD

BARROWS,

SOUTH PARIS, - - MAINE.

ALL ORDERS PUNCTUALLY ATTENDED TO.

F. C. MERRILL occupies a two-story wooden building, 35 x 45 feet, with foundry, 40 x 50 feet; also one floor of a two-story brick building, 30 x 40 feet, located on Main street, for the manufacture of plows, cultivators, Pettingill's patent hoes, cart hubs, &c.; commenced business in 1867. (Successor to T. Hersey & Co.:) employs twelve hands. Machinery is driven by a steam engine, 10-horse power, with one upright boiler, built by the Portland Co. of Portland; also run a center vent wheel. Turn out 600 plows, from 1,000 2,000 horse hoes per year, and do business amounting to $20,000 per annum.

S. T. KIMBALL occupies a wooden building, two stories, 42 x 24 feet, with blacksmith shop, 42 x 30 feet, located on Main street, for the manufacture of carriages and sleighs.

THE PARIS FLOURING MILL occupies a wooden building, three stories, 225 x 40 feet, located on Main street, for the manufacture of flour. Commenced business in 1858. Employs twenty hands. The machinery is driven by two Howe's, and three improved centre-vent wheels, 60 horse-power. They grind from 30,000 to 40,000 bushels of corn, and consume from 75,000 to 100,000 bushels of wheat, and turn out 18,000 barrels of wheat, and do business amounting to $25,000 per year. Also have a mill opposite for the manufacture of barrels, shingles and lumber. Machinery is driven by two centre-vent water wheels, 30 horse-power. They turn out 15,000 flour barrels, 250,000 feet of lumber, and 60,000 shingles per year.

BURNHAM & MORRILL, manufacturers of hermetically sealed vegetable cans, commenced business in June, 1868. Occupy a two story wooden building, 100 x 65 feet, located on Main street. Employ in the summer season, when packing, 150 hands; in the winter season, four hands, for making cans. Machinery is driven by a portable steam engine, 5 horse-power. Make and fill 180,000 cans per year, and consume 540 boxes of tin.

F. C. MERRILL,

(Successor to T. Hersey & Co.)

MANUFACTURER OF

PLOWS,

PETTENGILL'S PATENT

Cultivating Horse Hoe,

Cart Hubs, Boilers, Box Stoves, &c.,

SOUTH PARIS, ME.

Also, State and County rights of Pettengill's patent cultivating Horse Hoe for sale.

STRICKLAND'S FERRY, 38½ miles from Lewiston, and 73 from Portland, a country station on the Androscoggin Railroad.

TOPSHAM, 69 miles from Skowhegan, 31 from Portland, 142 from Boston and 185 from Providence, a village and town on the Portland and Kennebec Railroad, containing three churches and 2,250 inhabitants, situated on Androscoggin river, which separates it from Brunswick. This is a good farming town and was incorporated in 1764.

UPPER STILL WATER, about six miles from Bangor, a station on the Bangor, Oldtown and Milford Railroad.

VASSALBORO' 75 miles from Portland and 25 from Skowhegan, a station and town on the Portland and Kennebec Railroad, located on the Kennebec river. There are several large and beautiful ponds in this town from which issue two streams, one a branch of the Sebasticook, the other of the Kennebec. The soil is fertile, surface varied. The town was incorporated in 1771.

Vassalboro' has twelve powers. Five are situated on the outlet stream of China pond; dam upon each; head and fall upon each, about eight feet, attained in a running distance of twenty or thirty rods. The power upon this stream is nearly all employed in factories, saw mills, grist mills and shingle mills. The most important manufacturing establishment is the "Woolen Mill," of the "Vassalboro' Mill Company." There are, moreover, a saw mill, two grist mills, one shingle-mill and a shovel handle factory on the same stream. The privileges are all within a horizontal distance of two miles.

The woolen mill and grist mill operate all the year; the others only in summer. The wheels employed are chiefly wooden. The improvements of the power has increased the value of the town nearly one-half.

Six are situated upon the outlet stream of Webber pond; each with a dam and a head and fall of about eight feet in a running distance of twenty or thirty rods. These are now nearly all lying idle. Two of these formerly drove paper-mills, and one a sash and blind factory. All the powers on this stream are within a total distance of one and a half miles.

The twelfth power is on a stream flowing into Webber pond.

VASSALBORO' MILLS of this place were built by F. Skinner & Co., of Boston, Mass. The size of buildings are as follows: One, 200 x 80 feet, the other 200 x 50 feet. They manufacture cassimeres, doeskins and tricots. Employ 300 hands, run 20 sets cards, consume 750,000 pounds of wool per annum and turn out daily about 1,500 yards six-quarter and three-quarter widths. Power supplied by water. Agents, Leland Allen & Bates, 69 Franklin street, Boston.

WATERVILLE, 83 miles from Portland, and 55 from Bangor, a village and town by the same name, located on the Kennebec river, headquarters and central station of the Maine Central Railroad. The Portland and Kennebec Railroad also passes through this town. The town was incorporated June 23, 1802, and contains thirty square miles, mostly of the best

quality of farming lands of the Kennebec region. There was estimated to be in the town in 1868, a population of 5,200. Number of polls, 1,000; valuation of real estate, $1,000,000; personal property, $2,000,000; 20 public schools, 1,700 scholars, and churches as follows: 1 Methodist, 2 Baptist, 2 Freewill Baptist, 2 Universalist, 1 Congregationalist, 1 Unitarian and 1 Catholic. The tax is $1.50 on $100. There are three Banks, Peoples', Ticonic, and Waterville National Banks, and the Waterville Mutual Fire Insurance Company. The Colby University, an institution for the education of young men, (formerly Waterville College) is located here; also the Waterville Classical Institute, for the education of young ladies and gentlemen. The former was instituted in 1820. The number of students now attending is 31. The library contains 14000 volumes. The institution is endowed with $180,000. Commencement second Wednesday in August. Rev. James T. Champlin, D.D., President.

Waterville has fifteen powers, situated on Messalonskee, or Emerson's stream, and eight of these at West Waterville recorded; these, with the improvement thereon, will be considered first.

The distance from Snow pond to Rice bridge, below West Waterville, is about two miles, and the total fall nearly 111 feet, divided as follows:

First dam; at the foot of the pond; fall, six feet; owned by Ellis Saw Company, and others.

Second dam; fall, nine feet; owned by Hubbard, Blake & Co., and others.

Third dam; fall, thirteen feet.

Fourth dam; and the "Cascade Falls"; fall, forty-four feet.

Fifth dam; fall, fourteen feet. The third, fourth and fifth are owned by the Dunn Edge Tool Company; the total fall being seventy feet, with the "Cascade."

Sixth, a privilege; no dam; fall, eleven feet; owned by Emerson & Blaisdell.

Seventh, near Rice bridge; a privilege, no dam; fall, ten feet; owner not stated.

Eighth, falls between the dams; five feet descent; owner not stated.

The largest fall in the above series is, as appears above, the "Cascade," the total fall of which is forty-four feet in eight rods. The stream is about seventy feet wide, and flows over the dam about one foot deep.

About one-fourth part of the whole power is improved. The power is sufficient to saw 10,000,000 feet per annum. The improvements are five dams, saw mill, grist mill, scythe manufactory, tannery, machine shop, foundry, scythe and tool shop, etc.

The Turbine, Blake and Tub wheels are used. The Blake wheel uses less water, but is not as strong as the Turbine.

The improvement of the power has doubled both the wealth and population of (West) Waterville. Annual production, $500,000.

Market, the United States and the Provinces, via Maine Central railroad and connections.

The above statement applies to West Waterville only.

The following powers are found upon the same stream at Waterville village:

Ninth and tenth, "Crommett's Mills"; two dams; on the first a saw mill, sash and door factory, and grinding mill. The saw mill is owned by T. E. & L. E. Crommett; running the principal part of the time through the year. Sash and door factory owned by Faulkin & Sanders, doing quite an extensive business. The grinding mill is owned by T. E. Crommett. The west end of the dam is unoccupied, owned by T. W. Herrick, Joshua Nye, John & C. R. Mathews, with about thirty acres of land; fall twelve feet high.

Eleventh, a few rods below; a dam about eight feet high, on which is a woolen factory, at present unoccupied; Purinton & Lord's old tannery is situated on this dam, now owned by S. H. Ricker & Co. The head and fall of these two dams is about twenty-three feet.

Twelfth, some three-fourths of a mile further down, the "Paper Mill"; dam six feet high; owned by J. S. Manning of Massachusetts. The mill is doing quite an extensive business, running day and night through the year. Nathan Stilley, agent.

Thirteenth, some twenty rods further on, the "Iron Foundry", once built by the Fairbanks' establishment, of Vermont; was bought out some twenty-five years ago by Webber & Hartland, the present owners, who are doing quite a large business, and employ six or eight men. The east end of this dam is unoccupied; dam twelve feet high.

Fourteenth and fifteenth, still further on, are two good water-powers, on one of which is a dam, twelve feet high; unoccupied; owned by W. B. S. Moore and others.

As appears from the foregoing exhibit, there are ten dams on this stream; five at or near Waterville village, and five at West village, with good chances for three or four more.

The stream upon which these powers are situated is remarkable for its constancy, being supplied by lakes almost exclusively. The lake chain tributary to it, is reputed to have a length of sixty miles, and covers not far from twenty-seven square miles of surface. The lakes are very deep; some of them from ninety to one hundred feet, and constitute reservoirs of the highest excellence. The total power of water on the dams from August to January is only three feet or thereabouts.

Total annual production of mills in Waterville, estimated $1,000,000.

There are also two powers in the towns of Waterville and Winslow. First, There is now at Waterville a dam on the Kennebec river, near the railroad bridge, and built upon the crest of the ledge of the "Ticonic Falls." This dam creates the power which operates the several mills below it, consisting of a grist mill, plaster mill, door, sash and blind factory, saw mill, and a large wooden mill used for cutting lumber, etc. There is a large amount of power not now used.

The dam is built of wood, and averages about five feet in height; the head and fall obtained by it being about eighteen feet. The power now created by this dam on an eighteen feet fall, and in an ordinary summer's flow of water, is estimated (by comparison with the power obtained at the Augusta dam) at 4,000 gross horse-power, as developed at the dam. That is to say: The quantity of water flowing in the Kennebec river at Waterville is estimated (from observations made in the summer of 1867) at two-thirds the quantity passing over the Augusta dam. Hence, if the Augusta power is 6,000 horse-power on fifteen feet fall in an ordinary summer's flow of water, and this fact has been ascertained by measurements, the present dam at Waterville, with two-thirds the quantity of water, and with eighteen feet fall, would create 4,000 horse-power, as above.

Second, is another "Privilege" on the Kennebec river at Waterville, just above the present dam, with a head and fall of twenty-two feet. The whole power of the two privileges is now in the possession of the "Ticonic Water Power Manufacturing Company," who have lately completed the purchase of the water rights, river beds, buildings, and property necessary to the present development of the whole power. The property of the company comprises a front of about one and three-fourths miles, on the east side of the Kennebec river, and of about three-fourths of a mile on the west side, with four hundred acres of land, contiguous to the river and amply sufficient for the proposed dams, structures, mill sites, village sites, farming lands, and other appurtenances of manufacturing towns.

The company caused surveys, levels, soundings, cross-sections, and examinations of the river and adjacent lands, to be made in the summer of 1867, under the direction of hydraulic engineers. The engineers report, as a partial result of their examinations, that a total head and fall of forty feet can be economically obtained at this point, without interfering with the privileges above, and leaving a margin of unoccupied fall for future use, if found expedient or desirable. It is proposed by them to divide the whole power into two privileges, with a head and fall of twenty feet each, by raising the present dam two feet and building a new dam above, 800 feet long, with a head and fall of twenty feet. This arrangement would give, in an ordinary summer flow of water, say 4,440 horse powers to each privilege as developed at the dam, which would drive about 296,000 cotton spindles with preparation on print cloths. The total power of both privileges being 8,880 horse-powers, or sufficient for 592,000 spindles.

The river bed at the site of the proposed new dam, is of continuous solid ledge of hard slate rock, and the banks of the river covering the sites for abutments, bulkheads, locks, etc., are all of solid rock, of a height suitable for economical construction. The lay of the land on both sides of the proposed dam is well adapted for durable and economical construction of mills with their necessary trenches, raceways, etc. Materials for construction, such as timber, brick, granite and slate, can be easily obtained at low cost.

The Portland & Kennebec Railroad tracks pass by the side of the proposed mill sites, and the railroad company are pledged to afford all needed additional facilities of tracks as wanted. The depot of the Maine Central Railroad is also within convenient distance for freight and passenger facilities.

It is believed by practical men, that the Waterville water-power in the Kennebec river, from the amount of constant power furnished, the facilities for increasing the power in the future by a system of reservoirs above, the economy of construction, the convenience of location as regards freight and passenger facilities, the advantage of a fine farming country around it, and of obtaining plenty of the best kind of mill help, is justly entitled to be ranked as one of the best undeveloped water-powers in New England.

FUBBISH & SAUNDERS, manufacturers of doors, sash and blinds. Commenced business in 1867. Their buildings are located at Crummett's mills, and are as follows: A two-story brick building 40 x 86 feet, a two-story wooden building 35 x 40, with several smaller out-buildings, used as store-houses, dry-houses, lumber sheds, etc. They employ thirty hands, consume about 400,000 feet of pine and ash lumber per year, and do business to the amount of about $50,000 per annum. Their machinery consists of upright and circular saws, planing, morticing and moulding machines, and is driven by a four foot Tuttle wheel, built by Webber & Haviland, of Waterville.

DRUMMOND, RICHARDSON & CO. occupy a four-story brick building, 40x45 feet, and a two-story wooden building 40x80 feet, located on Water street, for the manufacture of doors, sash and blinds. Commenced business in 1866. Employ 30 hands, use 400,000 feet of pine lumber per year, and do business amounting to about 40,000 per annum.

WEBBER & HAVILAND occupy a three-story wooden building 30 x 60 feet, used as a machine and pattern shop, a brick foundry building 30 x 40 feet, and a two-story wooden building 30 x 40, used as a blacksmith shop and plough manufactory, located on the Waterville & Augusta road, on the west side of the Messelonskee stream. The goods manufactured by this firm are water wheels, mill machinery, ploughs, and all kinds of iron and brass castings. They employ 15 hands, and make about 200 tons of castings per year. The business was established in 1833, by Fairbanks & Company, manufacturers of Fairbanks's patent scales. The present proprietors, Messrs. Webber & Haviland, were at that time foremen in these works.

WEST BETHEL, a station in the town of Bethel on the Grand Trunk Railroad.

WELLS, 28 miles from Portland and 72 from Boston, a station and town on the Portland, Saco and Portsmouth Railroad. The place has one church. There are a number of small streams or brooks running through the town in various directions. The principal river was called by the Indians "Webhannet," but is now called Town river. A sand-bar at the entrance renders the navigation somewhat difficult. Ogunquit river, in the southerly part of the town, forms a harbor for small coasting and fishing vessels. The town contains about 35,000 acres of which one-fifth may be considered waste land.

Wells has fifteen powers, small. Ten are situated on Little river, two on Ogunquit river, two or Webhanett river, one on Branch river.

The fall at the various privileges is from ten to fifteen feet; the power capable of sawing 1,000,000 feet of lumber, less or more, yearly. It is all improved as now used, with not the best machinery. Rose, Centre-vent, Spile-vent wheels.

Streams not connected with lakes or ponds; artificial reservoirs not feasible. Good granite; convenient sites; but little forest. The powers give employment to about fifty men for about half of the year, and so aid them materially in the way of business. Value of lumber sawed, $75,000.

WEST BROOK, 5 miles from Portland, and 58 from Augusta, a station and town on the Portland & Kennebec Railroad. (See Saccarappa.)

This town has twelve powers. Three of the above are situated on the Presumpscott river; one at Cumberland Mills village, five miles from Portland, on the Portland & Rochester Railroad, and two in the village of Saccarappa, six miles from Portland, also on the same railroad.

First, "Cumberland Mills power," a fall of twenty feet, containing fourteen mill-powers, or 2,013 horse-powers, of which about one-half is now in use in the manufacture of paper. The mean velocity of the stream is 1 and 52 one-hundredths feet per second, or eighteen one-fourth inches, taken from five observations, the mean depth of the stream, taken 500 feet above the falls, (an average of cross section of 682½ feet.) is 3 and 31 one-hundredths feet, the width of the stream being 176 feet.

The improvement of the power has increased the population and wealth of the village to a very large extent, there being from 1864 to 1867, an increase of resident families from sixteen to sixty-six, and of dwelling houses, for the same period, from sixteen to forty-eight. The height of these falls, above the sea, is about thirty feet, and the range from high to low water is five feet. The market is chiefly Boston and New York, reached by Portland & Rochester Railroad and teams to Portland, thence by railroad and steamers.

Second and Third, the "Upper Power," at the village of Saccarappa has a fall of twelve feet, and the "Lower Power," of nineteen feet; containing respectively, thirteen and eight mill powers, making a total of twenty-one mill powers; of which number thirteen are now in use. The cross section of

the upper fall is about [illegible] feet, and that of the lower eight feet, taken fifteen feet above the falls. A small portion only of the powers is improved.

The several mills are owned as follows: on the northeast side of the river, by the Westbrook Manufacturing Company and Messrs. King & Warren. Those on the southwest side, by Messrs. Warren & Walker, the Patent Wire Company, Judge Fitch, Hon. J. Libby, and others. (See Saccarappa.)

The total amount of manufactures is about $2,[illegible].

The machinery is for the most part very good for economizing power. The wheels used are Coates' centre-vent, Reynolds', Blake's, and Tuttle's; but these wheels do not give as good per cent. of the power of the water as some of the late improved and more highly finished patterns.

The capacity of the connected lakes and ponds may be increased to any extent by additional dams and the erection of new dams, etc., at a moderate expenditure. The volume of freshet as compared with the ordinary volume of the stream is but little more than double. There has been no destruction in past years from high water. The stream can be made uniform in its volume throughout the year. The lay of the land about these falls with reference to the convenient location of mills and workshops is all that can be desired for the most part. The several proprietors on this river would be disposed to have surveys taken at their own expense for the speedy exhibition of their property. About one-eighth of the river basin is covered with forest. The height of the river at Saccarappa is about sixty-two feet above the sea. The out-cropping and underlying rocks, blue trap, are well adapted for rough, strong erections.

Duck Pond stream takes its rise from the pond of the same name, which pond is over three square miles in extent and over twenty feet average depth. It is supplied chiefly from small ponds and springs, and is 1[illegible] feet above the level of the sea. The stream is over ten miles in length from "[illegible]'s Bridge" to the pond, and is 1[illegible] feet above the river at this point. The width of the stream is pretty uniform at about forty feet.

Fourth. The only improved power on this stream is at the outlet of the pond. The height of the falls is seventeen feet, and the power is estimated at fifty horse. It is owned by the Cumberland Bone Manufacturing Company, and is employed in the manufacture of bone manure, and of pails and tubs; employing about twenty-five men and producing in the manufacture of bone manure about $[illegible] annually, and that of pails and tubs about $30,000.

Fifth, sixth, seventh, eighth and ninth, there are five additional good mill sites on this stream, which, with the aid of dams, would give a fall of from fifteen to twenty-five feet each, and from fifty to seventy-five horse-power. About one-sixth of the basin of the stream is covered with forest. The population and wealth are nearly all due to the power improvement. The market is chiefly in this State, by teams to Portland. Wholesale Tuttle's and [illegible]. The capacity of the pond could not be increased with advantage to any great extent. There has been no injury in years past from freshets. Stream may be made perfectly uniform throughout the year. The lay of the land for mills and workshops, good. Rock, blue trap. Large quantity of granite very convenient.

Tenth, on the Presumpscot River, in the village of Stroudwater, about two and one-half miles from Portland. The falls are twelve feet high, and the grist, saw and spool mills upon them are owned by W. H. Stevens. Three runs of stones and three [illegible] stands employ about [illegible] men, produce about $[illegible] annually, capable of grinding forty bushels of corn per hour. The average depth of stream is about [illegible] feet, taken 100 feet above the dam. The falls are twelve feet above the sea. The market is chiefly Portland, reached by teams.

Eleventh and twelfth, about three miles further up the stream, within one mile from the village of Saccarappa. The upper, known as the "Johnson Falls," is seventeen feet high. The lower fall is [illegible] high, and is known as the "Hatch Falls." The height specified is attained respectively in a horizontal distance of about 1,000 feet. The falls are situated about one-half mile from each other. The upper fall is rated thirty, and the lower sixty-three and one-half horse-power.

There is a small threshing and saw mill owned by Henry Johnson, but scarcely in running order yet. No other improvement on either fall. The river has quite a small flow of water, but there is generally a stream of not less than one foot wide.

Lay of the land eligible for mill purposes. Trap rock; no injury to be apprehended from freshets. The dams for these two powers would require but a small outlay; the water could be taken to a penstock, and by so doing a dam one or two feet high would be all that is required.

S. D. Warren. The manufacturing of paper was established at this place by G. Warren & Co., and afterwards succeeded by the present firm, Mr. S. D. Warren. He employs 200 men and 150 females. Has five paper machines: one 84 inch, two 82 inch, one 72 inch, and 56 inche. The mill consumes ten tons rags, seven tons coal, chemicals, &c., producing seven tons finished paper daily. Office 91 Milk street, Boston, Mass.

WEST PARIS,

40 miles from Portland, a station in the town of Paris, on the Grand Trunk.

Andrews & Dean occupy a wooden building, 30 x 30 feet, for the manufacture of flour. Commenced business in 1866. Employ three hands; their machinery is driven by one Tyler water wheel, 12 horse-power. They consume or grind 5,000 bushels of wheat and corn and 4,000 barrels of flour per year.

A. M. Field occupies a two story wooden building, 25 x 35 feet. Repository one story wood, 20 x 80 feet, located near this station, for the manufacture of carriages and sleighs. Commenced business in 1862. Employs six hands; turns out 30 carriages and 25 sleighs. Consumes $1,000 worth of iron and from 3 to 6,000 feet of lumber per year. Hires [illegible] amounting to $1,[illegible]. Post office address, Bryant's Pond.

F. L. & L. F. Willis occupy two saw mills, one located one mile south, the other, one mile north, the station, for the manufacture of lumber, clapboards, shingles and laths.

WEST SCARBOROUGH,

9 miles from Portland, 11 from Saco, 50 from Portsmouth and 98 from Boston, a station, containing one church and located in the town of Scarborough on the Portland, Saco and Portsmouth Railroad.

WEST WATERVILLE,

[illegible] miles from Portland and [illegible] from Bangor, a manufacturing village in the town of Waterville. (See Waterville.)

Hubbard, Blake & Co., manufacturers of scythes and axes. Commenced business in 1856; employ 40 hands; turn out about 48,000 scythes and 24,000 axes per year, and do a

business amounting to about $80,000 per annum. The buildings which they occupy are of wood, and are as follows: A one-story building, 30 x 122 feet, used as a hammer shop, with two wings, 15 x 30 feet and 15 x 20 feet, used as grinding and tempering shops, a two-story building, 30 x 60 feet, used as grinding and polishing shops, a one-story building, 20 x 30 feet, used for tempering scythes, and a two-story building, 25 x 40 feet, used as a storehouse, with several out-buildings used as offices, storehouses, coal sheds, &c. They run 10 trip-hammers, 5 large grindstones and a large number of smaller grinding and polishing wheels for finishing the work. The motive power is furnished by two 4 feet Tuttle wheels, built by Webber & Haviland, Waterville, Me., and one 30 inch Turbine wheel, built by Benjamin Allen, of West Waterville, Me.

The Dunn Edge Tool Company was incorporated in 1856, with a capital of $36,000. R. B. Dunn, President; John Ayre, Treasurer and Agent. In West Waterville they occupy a number of wooden buildings, whose dimensions are as follows: a one and a half story building, 40x155 feet, used as a hammer shop; a polishing and grinding shop, two stories, 34x100 feet; a one story building containing a hammer, grinding, polishing and paint shops, 33x150 feet, and a storehouse and office building, two stories, 22x65 feet. At Fayette, (a post township in Kennebec county, 15 miles W. N. W. of Augusta,) they occupy a one story building, 36x235 feet, used as a hammer shop; a polishing shop, two stories high, 40x65 feet, and a storehouse one and a half stories high, 22x40 feet. These buildings are also of wood. They manufacture scythes, axes, hay and straw knives and grass hooks, giving employment to 110 hands, and turning out about 150,000 scythes, 18,000 axes and a large number of other implements per year, and do a business amounting to about $180,000 per annum. For the manufacture of these various implements they run 18 trip hammers, 13 grindstones and from 12 to fifteen polishing wheels. The power is supplied by 10 water wheels of the following descriptions: one 4 feet Leffel wheel, built by James Leffel & Co., of Hartford, Conn.; one 4½ feet, one 3½ feet, one 3 feet and one 2½ feet Blake wheel, built by Luther Whitman, of Winthrop, Me.; two 4 feet and three 3 feet Tuttle wheels, built by Webber & Haviland, of Waterville, Me.

Benjamin & Allen occupy a two story wooden building, 40x100 feet, and two one story wooden buildings, 30x60 feet and 30x45 feet, respectively, and a shed building, 30x100 feet, for the manufacture of horse powers,—threshers, separators, ploughs, cultivators, iron castings and all kinds of wood and iron machinery. The business was established in 1863, by A. P. Benjamin. They employ 20 hands and do business to the amount of $35.000 per year. Their machinery is driven by a Blake water wheel of four feet diameter, built by P. C. Holmes & Co.. of Gardiner, Me.

J. Batchelder & Son, manufacturers of chairs and settees: occupy two 2 story wooden buildings, 25 x 50 feet and 32 x 40 feet respectively. Commenced business in 1857. Employ seven hands, and do business to the amount of $12,000 per year. Their machinery is run by a Kendall water-wheel, 3½ feet in diameter.

Hamblin, Fair & Co., shirt manufacturers. They occupy one 3 story building 30 x 80 feet; employ from 35 to 40 girls in the building, and 50 to 75 regular sewers ouside, taking work from the factory; run eight Wheeler & Wilson sewing machines. They manufacture gents cotton and linen shirts; laundrying, labeling and putting them in dozen boxes, fitting them all ready for sale there. They consume some 36,000 yards cotton and 7,500 linen per annum, and manufacture 1,200 dozen shirts or upwards, and do upon an average, a business of about $25,000 per annum. Have an office at 50 Hanover street, Boston, Mass.

Wilton, 55½ miles from Lewiston, and 90 from Portland, a village and town on the Androscoggin Railroad. This town has a fertile soil, and is watered by Wilson's stream, which furnishes excellent water power for the following manufactories:

Fernalds & Son's new woolen mill, a model building, 60 x 42 feet, for two sets of machinery for the manufacture of cashmere.

The boot and shoe business is carried on quite extensively at East Wilton.

The Scythe Manufactory, Hiram Holt, proprietor, manufactures 4,000 dozen of various patterns to order, doing a business of $50,000 per year.

At Wilton there are also the many manufactories of pegs, grist and saw mills, cabinet shops, carriages, etc., usually found in a country village.

Agricultural pursuits are followed here to profit, the raising of stock forming the first feature, there being some of the finest stock raised in Franklin county that can be found in Maine. Fruit growing is the next in importance, being raised in large quantities for export to western markets, and is largely on the increase. The population are generally in a thriving and prosperous condition, with every facility at command to develop their resources, which is the main object in view.

Wilton has ten powers, all situated on Wilson's stream, the outlet of Wilson's pond, in the south part of the town, which forms the reservoir for the powers at and below the outlet.

This pond, according to the town plan, contains 390 acres, but the surface now flowed by the dam, which is five feet six inches high, is much greater. The pond is very deep; in one part no bottom can be found with a line 175 feet long. This great body of water retains the heat, so that there is no trouble from ice at the mills near the pond. North pond discharges its water into Wilson's stream, above East Wilton. The area of this pond is nearly as great as that of Wilson's.

First, at the outlet, an old grist mill and saw mill standing, but not now used. The Woolen Manufacturing Company at East Wilton, has purchased the land and privilege, and now use the pond as a reservoir for the powers at East Wilton. Fall from eleven to fifteen feet; occupied by saw mill and shingle mill, with right to draw one and a half feet below top of dam; will saw 3,000 feet hemlock and 5,000 shingles per day; except in severe drouth can saw most of the time, summer and winter. Flouring mill with four runs of stones and cleanser, now used for custom work only. This mill, with all gates hoisted, draws 277 inches water. Mr. A. Wilkins, the miller, estimates that he could run his mill six hours per day with a full head from all his gates, after the saw mill has to stop. Starch factory, with right to draw sufficient water for the same nine months in the year.

Second, with seven and a half feet fall.; Brown's planing machine and furniture manufactory; also, Furnel's planing machine.

Third, estimated fall eight feet; Furnel's woolen factory.

Fourth, fall six feet; Sullivan's carding mill and planing machine.

Fifth, fall five feet; Bass' tannery.

Sixth, fall fifteen feet; unoccupied; F. Robbins.

Seventh, fall ten feet; Bartlett's saw mill, threshing machine, &c.

The foregoing powers are all within three-fourths of a mile of the pond, and amonnt to but 66¼ feet, reckoning the grist mill to top of dam fifteen feet. The fall from Wilson's pond to the first mill-pond at East Wilton, a distance of about three miles, is 150 feet, according to two surveys.

There is one good power between C. Bartlett's mill and

East Wilton. One or two others of about three feet may be had.

Eighth, fall fourteen feet, at East Wilton; Holt's scythe factory, Harper's saw mill, spade handle factory, &c.; plenty of water year round.

Ninth, fall thirteen feet; Wilton woolen factory; three sets machinery, forty looms, new ones. Mr. Townsend, the agent, says there is plenty water to run five sets.

Tenth, [illegible] feet; Swayne's [illegible] grist mill, one run of stones.

WINTHROP, is located on the Maine Central Railroad, 10 miles west from Augusta and 20 miles northeast from Lewiston. It was incorporated 1771, and now (1869) contains 2,670 inhabitants, 1,327 males and 1,343 females. It has two post offices, Winthrop and East Winthrop—received through these offices, 991 numbers of periodicals and 10,296 letters yearly. Winthrop village, East Winthrop, Baileyville and Pleasant [illegible] are the important points in the town. There are 500 dwellings, 120 families, one public schoolhouse [illegible]; 567 scholars attending. The valuation of real and personal estate $807,840; tax per $100, $1.50. There is one bank, the First National Bank of Winthrop, capital $100,000. The Congregationalists have one house of worship, Methodists one, Baptists one, Universalists one, and Quakers one. Principal buildings, town hall and academy and a large well kept hotel.

The late lamented Dr. E. Holmes, professor of chemistry, agriculture, etc., and editor of the *Maine Farmer*, was a resident of this town. Kennebec county is styled "The Garden of Maine", and Winthrop is the best agricultural town in the county. The soil is generally a fine, deep, strong loam which well repays for culture. The farmers are intelligent and independent. One-fourth the area of the town is water; eleven most beautiful lakes and ponds. The surface in West Winthrop is undulating and hilly—in part mountainous. In East Winthrop undulating and easily accessible to agriculture. Winthrop with its fields and forests, mountains and ponds, gives the most enchanting scenery in Maine. Mount Pisgah, 1,140 feet high, gives a grand view of the country, and an imposing mountain view to the west and north. The inhabitants are industrious, temperate, healthy and long-lived. Health and long life are due to occupation, temperance, pure air and pure water. Here are 120 persons over 70 years of age, 4½ per cent. of the inhabitants. Retired gentlemen are seeking [illegible] homes here.

There are six powers in this town. "There is quite an extensive manufacturing business in town, worked by an excellent water-power, situated in the village, and between the two ponds called the North and South."

First, the Winthrop Mills Co., a woolen factory; about fifteen feet head and fall; manufactures blankets.

Second, a grist mill of about the same power, and a bark and fulling mill, on same dam. The grist mill grinds 14,000 bushels of grain of all kinds per annum; the bark and fulling mills are unemployed.

Third, a saw mill and oilcloth factory, same dam, about twelve feet head and fall; mill saws about 200,000 feet of lumber annually; the factory makes [illegible]; amount of goods manufactured and sold, $75,000.

Fourth, "Winthrop Agricultural Tool Manufactory," [illegible] started, and a saw mill on the same dam; about the same as the other privileges for power; the mill cuts out 300,000 feet per year.

Fifth, on a small stream leading from Carlton pond to East Readfield, and emptying into Narrow's pond, is a factory a part of the year, occupied by Jacob Pope of Manchester, to polish and finish hay forks, &c.; formerly used for a saw mill.

Sixth, on a small stream leading from a small pond in East Winthrop and emptying into the Cobbosseecontee or Winthrop Great pond, used by Pettis Brothers for grinding bark, &c., for a tannery.

H. L. [illegible], boot and shoe manufactory. Commenced business in 1858. He occupies a two-story wooden building, 16×36 feet, located on Main street. Employs 12 hands, turns out from 6,000 to 7,000 pairs per year and does business to the amount of about $25,000 per annum.

C. A. Wing, boot and shoe manufacturer. Commenced business in 1848. He occupies three floors of a wooden building, 40×70 feet, located on Main street, where are manufactured men's calf, kip and wax boots for the California trade. He employs 50 hands and turns out about 150 cases per month.

B. F. Wing occupies a two-story wooden building, 30×40, located on Main street, for the manufacture of men's calf, kip and wax boots for the California trade. Employs from 40 to 60 hands in the winter and turns out about 200 cases per month. This firm and that of C. A. Wing were pioneers in the California trade.

[illegible] & [illegible], manufacturers of moccasins, commenced business in 1867. They occupy a two-story wooden building, 20×40 feet, located on Union street. They employ 10 hands in the season, turn out about 7,000 pairs of moccasins per year and do business to the amount of about $12,000 per annum.

The Winthrop Agricultural Works, Luther Whitman, Proprietor, was established in 1864. They are located on Mechanic Row. The buildings comprise two three-story wooden buildings, 40×120 feet, 30×40 feet and 30×40 feet, respectively; also a one and a half story wooden building, 30×170 and two one-story wooden buildings, one of which is 30×40 feet, with an ell 20×40 and the other 25×40 feet. In these works are manufactured all kinds of agricultural implements, mill work and machinery. The number of hands employed is 70. The machinery, consisting of turning machines, lathes, planers, punches, drills, boring, trip hammers, &c., is driven by [illegible] Whitman turbine wheels, built at these works.

The Winthrop Mills Company, located on Main street, was incorporated in [illegible], with a capital of $150,000. J. D. [illegible] is President, Francis Cabot, Treasurer, and F. C. [illegible], Agent. The principal building is of brick, four stories high, 50×100 feet, with two wings 25×74 feet and 20×40 feet, respectively. They also occupy a two-story brick building, 40×60 feet, and a two-story wooden building, 25×60 feet. In the two first mentioned buildings there are manufactured woolen blankets and in the latter cotton warps. They employ 120 hands, use about 300,000 pounds of wool and about 200,000 pounds of cotton per year, and turn out 75,000 pairs of blankets and 180,000 pounds of cotton warp per annum. The machinery, consisting of 8 sets of woolen machinery and 800 spindles, is driven by a Warren turbine wheel, built in Amherst, Mass., and a Whitman turbine wheel, built by Luther Whitman, of Winthrop, Me.

S. W. Pettis, commenced the business of tanning and manufacturing of leather in 1864. The business was established in 1800 by H. Pettis & Co., and conducted by this firm until it was succeeded in 1864 by Mr. S. W. Pettis. Mr. P. manufactures from 800 to 1,000 hides and skins per annum, and in the year 1868 turned out 2,000 sides of leather, [illegible] amounting to about $16,000. The machinery in the bark and hide mills is propelled by water power. This establishment

is situated in East Winthrop, four miles from Winthrop station and six from Augusta.

H. Parlin & Co., at East Winthrop, are situated four miles from Winthrop depot and six miles from Augusta. Their business is principally on men's, boys' and youths' heavy boots and shoes. They do from $12,000 to $15,000 in the thick boot business. All of their work is done by hand and warranted. They calculate to get up the *best* work that can be made. Their tan yard is situated at West Waterville. They tan all of their upper stock; probably tan from 800 to 1,000 hides yearly.

WOODFORD'S CORNER, a country station on the Portland and Rochester railroad, and Portland and Kennebec railroad, 15 miles from Portland.

YARMOUTH, 16 miles from Portland, and 47 from Augusta; a station and town on the Portland and Kennebec, and Grand Trunk railways. The town was incorporated in 1849. There are five churches, ten schools, and the North Yarmouth Academy, the latter having an average attendance of 100 scholars, male and female. Population 2,600; Yarmouth has six powers. They are called, one, "Gooch's"; four, "Baker's" one, the "Factory Fall." All are situated on Royal's river; combined height, sixty-six feet in one mile.

Power estimated sufficient to grind seventy-five bushels of grain per hour each. Power is not all improved; mills work all the year; machinery not the best.

Stream connected with three small ponds. Range from lowest to highest water, eight feet. Effect of the improvement of the power upon the wealth of the town, excellent.

A. C. Young occupies a two story wooden building, 60 x 60 feet; ell 100 x 20 feet; store house 20 x 20 feet, located on Main street, for the tanning and currying of leather. Commenced business in 1864. Employ seven hands, have one Harrison's patent steam boiler, made in Philadelphia, Penn. They tan about 3,000 sides of leather per year, and consume 100 cords of bark. Do a business of $12,000 per annum.

Royal River Manufacturing Company occupy a four story brick building, 40x80 feet, with an ell, 20x60 feet, a storehouse, two stories, 25x30 feet, two other houses, each 20x35 feet, for the manufacture of seamless bags and warp yarns, located on Factory street. Employ 75 hands. Incorporated in 1857. Capital, $60,000. The machinery is driven by a five feet Blake water wheel; consume 1,400 pounds of cotton and turn out 700 bags and 400 pounds of yarns per day. They have a steam boiler 8 feet long and 4 feet in diameter, built by Finney & Hoffman, of Brooklyn, N. Y.

A. L. Cole occupies one floor of a two story wooden building, located on Lafayette street, for the manufacture of woolen blanketing. Commenced business in 1867. Employs two hands. The machinery consists of two sets of cards, one spinning jack and one loom, which are driven by a Blake water wheel of four and a half feet diameter.

Craig & Thompson occupy a two story wooden building, 40x60 feet, and ell, 35x35 feet, located on Lower Falls, for the manufacture of lumber, shingles and laths. Commenced business in 1862. The capacity of the mill is 1,800,000 feet of lumber, 5,000,000 shingles and 500,000 laths per year; run by one large Chase water wheel, 4 feet buckets.

Brown & Denison occupy a three-story wooden building, 130 x 40 feet; two storehouses, one 40 x 60, another 50 x 60 feet, located on Royal River, for the manufacture of fine papers. Commenced business in 1867. Employ 30 hands. Consume three tons of rags per day, turn out 3000lbs of paper per day. Run one Chase and two Blake water wheels, 165 horse-power, have one steam boiler, 60 horse-power, built by Quinn & Co., of Portland, Maine.

G. P. Thompson occupies a room 42 x 20 feet, in a two-story wood building, located on Lafayette street, for the manufacture of machinery. Commenced business in 1867. Employs two hands, has one engine lathe, one jig saw, one circular saw and a machine for making ship trunnels; are driven by a 1½ foot Blake water wheel.

A. L. Loring & Co., Yarmouth Flour Mills, occupy a four-story wood building, 40 x 50 feet, and two-story wood building, three-stories 35 x 40 feet each. Storehouse 30 x 40 feet, Cooper shop, 20 x 30 feet, for the manufacture of Flour. Commenced business in 1862, employ 13 hands, consume 5,000 bushels of wheat, turn out 10,000 barrels of flour per year. This firm also manufactures their own barrels, run three Chase, two Blake and one French Turbine water wheels, 300 horse-power, and do a business of $25,000 per annum.

YARMOUTH JUNCTION, 12 miles from Portland on the Grand Trunk Railway. The Portland and Kennebec Railroad crosses here. Located in the town of Yarmouth.

NEW HAMPSHIRE.

ALTON, 27 miles from Dover and 1½ from Alton Bay, a station and town on the Dover and Winnipiseogee Railroad. The town borders on the Winnipiseogee lake and bay. The surface is rough and uneven, the soil hard and rocky, but productive when well cultivated. The town was originally called New Durham Gore, and was settled in 1770 and incorporated in 1796. In 1868 there were [illegible] ratable polls in this town. Valuation [illegible]. The proportion on a $1,000 State tax was $[illegible]. There were [illegible] horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; and [illegible] sheep, valued at $[illegible]. Value of lands, $[illegible].

Thompson & Twambly established business in 18[illegible]. They occupy four buildings for the manufacture of cotton and woolen bobbins, thread and silk spools of every description. Main building [illegible] feet, three stories high, with blacksmith shop, dry house and lumber house. Employ [illegible] hands and do $[illegible] worth of business per annum.—Power, [illegible] feet overshot wheel with [illegible] feet fall.

ALTON BAY, 28½ miles from Dover, a station in the town of Alton, at the terminus of the Dover and Winnipiseogee Railroad, on the Winnipiseogee Lake.

AMHERST, 48 miles from Boston, and [illegible] from Nashua. A station and town on the Wilton branch from Nashua. Souhegan is a considerable and very important stream, and in its course to the Merrimac river from this town, affords some of the finest water-power privileges in the country. The soil is generally good. The town was incorporated 17[illegible]. In 1868 there were in the town [illegible] ratable polls, and the valuation was $[illegible]. There were [illegible] horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep, valued at $[illegible]; value of lands, $[illegible].

ANDOVER, [illegible] miles from White River Junction, and [illegible] from Concord, a station on the Northern railroad of New Hampshire, located in the town of Andover. The Blackwater river, in the northwest part of the town, is the principal stream; [illegible] and brooks find their way down the hills into the ponds or Blackwater. There are six ponds in this town, the largest of which are Chance and Loon ponds, each [illegible] and three-fourths [illegible]. The surface of the town is uneven, and in some parts rocky and barren; the soil in the more fertile parts good. The name was formerly New Britain, retaining it till June 25th, 1779, when it was incorporated by its present name, Andover, though rough, is well adapted to grazing. In 1868, there were in this town [illegible] ratable polls, and the valuation was $[illegible]. There were [illegible] horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep, valued at $[illegible]. The value of lands was $[illegible].

Kimberly Pin Co., established in 18[illegible], by A. B. [illegible] & Co., occupy a three-story building [illegible] feet, employ [illegible] hands and produce [illegible] papers of pins daily. Business done amounting to $[illegible] per annum. A [illegible] power Russell wheel drives the machinery. Pins sold to S. W. Hale, New York, and by him sold to parties in England, Austria, Germany, and in fact, throughout most of Europe. Trade mark, United States flag.

ASHLAND (formerly Holderness), 45 miles from Concord, 117 from Boston, [illegible] from Plymouth. A station and town on the Boston, Concord and Montreal R. R. The village is about half a mile from the depot and contains two churches.

This new town was incorporated by act of the Legislature, from a portion of the old Town of Holderness. It is situated on the Squam river, which is the outlet of the Squam lakes. These lakes are twelve miles in length, and average about four in width, containing a surface of [illegible] square miles. The Lake Company's improvements for controlling the water enable them, when necessary, to draw the whole surface down eight feet, making it one of the best water-powers in the State, [illegible]. It falls [illegible] feet in the space of less than two miles, passing over many different dams. In 1868, there were in this town [illegible] ratable polls. The valuation was $[illegible].

In order to give an idea of the business done in this new town, we will begin with the upper or dam number 1. Here the Lake Company has a new and substantial saw-mill, also machinery for the manufacture of shingles and [illegible].

Dam No. 2. On this stand is the Lake Company's Grist-mill, capable of doing business to the amount of $[illegible] per [illegible].

Here, too, is the hand and glove factory of Messrs. [illegible] & [illegible], producing [illegible] dozen of buck [illegible] monthly. They employ from [illegible] to [illegible] [illegible], who [illegible] [illegible] of Messrs. Appleton, [illegible] & Co. They make from [illegible] to [illegible] [illegible] per year, and employ eighteen workmen.

Dam No 3 is occupied by the GRAFTON WOOLEN MILLS, White & Warner, Proprietors, commenced the manufacture of fancy shirtings in 1864. They occupy one mill, 75 x 35, three stories above basement, brick. Run four sets of Woolen machinery, sixteen broad looms, employ 60 persons, consume 180,000 lbs. of wool and 20,000 lbs. of cotton yearly, producing 1600 yards daily. Two Blake and Union wheels supply the power, the fall is twelve feet,

On dam No. 4, MESSRS. J. F. KEYES & CO, manufacturers of Manilla paper, commenced business in 1848. They occupy several buildings of the following sizes: main building, 32 x 70 feet; bleachery, 24 x 40 feet; stock house, 24 x 40 feet, each two stories; office, 16 x 20 feet, one story; wood sheds, 20 x 60 feet and 24 x 70 feet. They employ ten hands and make about 1200 lbs. of paper daily. Use water-power and drive four 30-inch engines, machines, pumps, rag-cutters and rotary bleachers, also one 48-inch machine. Fall 18 feet.

Also on this fall is the straw board mill of S. C. BAKER. This mill uses about three hundred and fifty tons of straw, from which is made two hundred and fifty tons of board per year. Mr. Baker has also a hosiery mill attached, which produces thirty thousand dozen of cotton hose annually. He employs in both mills about forty workmen. MESSRS. MEAD BROTHERS wood workers and house carpenters, run their mill from this dam. They have machinery capable of employing twelve workmen.

Dam No. 5 is occupied by SCRIBNER & DRAKE, manufacturers of shoe-pegs to the amount of 2500 bushels per month, employing twenty-five workmen. They also run from this dam a paper mill producing about one hundred and fifty tons of Manilla paper, yearly.

Dam No. 6. MESSRS. GORDON, WRIGHT & CO. have here a straw board mill; employ ten or twelve workmen and manufacture about two hundred tons of board annually; also MESSRS. F. & L. SCRIBNER have a fine paper mill which produces one hundred and fifty tons of medium and tissue paper, with nine workmen.

Dam No. 7. MESSRS AMES & CLOUGH make about one hundred and fifty tons of fine tissue paper and employ nine hands. Connected with this mill is a tannery where stock for the famous Plymouth gloves is prepared.

It should be remembered that most of the paper mills mentioned above run both day and night. This fact adds largely to the amount of water used. It is also worthy of notice that when a few more of the best improved wheels shall take the place of those now in use, they will have water-power for double the business now done.

ASHUELOT, 15 miles from Keene, and 8 from South Vernon, a country village on the Ashuelot Railroad, in the town of Winchester.

ASSABESIC, 5 miles from Manchester, and 36 from Portsmouth, a country station on the Concord & Portsmouth Railroad.

ATKINSON, 37 miles from Boston, a station on the Boston & Maine Railroad. The town is situated a little off the railroad. The surface is uneven, the soil of superior quality and well cultivated. Incorporated September 3, 1767, by its present name in honor of Theodore Atkinson. In 1868 there were in this town 135 ratable polls; valuation, $262,320. Number of horses and mules, 80, valued at $4,686; 346 cows, oxen and neat cattle, valued at $9,376; 50 sheep, valued at $88; value of lands, $169,597.

AUBURN, 33 miles from Portsmouth and 8 from Manchester, a village and town in Rockingham county, on the Concord & Portsmouth Railroad. This village is situated about one mile from the station and contains one or two churches. The town had in 1868, 191 ratable polls; valuation $383,637; proportion on $1,000, State tax, $2.57. There were 126 horses and mules, valued at $5,147; 479 cows, oxen and neat cattle, valued $11,107; 401 sheep, valued at $734; value of lands $206,-481.

BATH, 94 miles from Concord, 170 from Boston, 213½ from Providence, on the Boston, Concord and Littleton railroad, a village containing two churches in the town of Bath, and a splendid water power, which might be improved to advantage.

This town is pleasantly situated in the vale of the Connecticut, between the Green mountains on the west and the White mountains on the east, by which it is effectually shielded by high winds and long storms; the soil on the hills is generally a reddish loam on a bed of marl. In the valleys it is alluvial. Settled in 1765.

In 1868 there were in this town 326 ratable polls—$558,828 worth of real estate, and the proportion on State tax was $3.75.

There were 323 horses and mules, valued at $21,071; 1221 cows, oxen and neat cattle, valued at $43,473; 8,525 sheep, valued at $18,143. Value of lands, $300,451.

BEDFORD, 1 mile from Manchester, a station on the Manchester & North Ware Railroad, near to and really a part of the city of Manchester.

BERLIN FALLS, a station in the town of Berlin, on the Grand Trunk Railroad. It has 150 inhabitants. The town has 96 ratable polls. Valuation of real estate, $143,570. The proportionate state tax on $1,000 is 97 cents. The town has five schools, with an average attendance of thirty scholars. There are five saw or lumber mills in and about the village.

J. W. WHEELER, located 2½ miles from the station, for the manufacture of lumber.

R. H. & J. W. WHEELER occupy a mill three miles from the station, for the manufacture of lumber, clapboards, shingles and lathes.

THE BERLIN MILLS COMPANY are located one mile from the station, for the manufacture of lumber, clapboards, lathes and shingles.

DANIEL GREENE occupies a mill one mile from the station, for the manufacture of lumber.

WILLIAM WILSON occupies a mill one-half mile from the station, for the manufacture of salt boxes.

BOSCAWEN, 59 miles from White River Junction and 10 from Concord, a village and town on the Northern Railroad of New Hampshire. Besides the Merrimac, the west part of this town is watered by Blackwater river, running nearly parallel with the former through the whole extent of the town. It is not a large stream, but very important, both on account of the fertile fields on its borders and water privileges it affords. Great Pond, near the center and Long Pond in the west part of the town, are the only bodies of water. The soil is excellent.

The surface, when viewed from its highest parts, appears uncommonly level. The town was incorporated in 1766, receiving its name from a celebrated English Admiral then on the American station. Settled in 1764. In 1858 there were [illegible] ratable polls in this town; valuation $[illegible]—181 horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle valued at $[illegible]; 1,[illegible] sheep, valued at $2,771; value of lands $[illegible].

Geo. S. Royal, carriage manufacturer. This business was established in 18[illegible], by Royal & Atkinson. In January, 18[illegible], the partnership then existing was dissolved, since which time the business has been done by the above name. He occupies two 2-story buildings, one 22 x [illegible] feet, with basement, the other 24 x 2[illegible] feet, with basement, including blacksmith, paint shop, &c. Employs about 12 men, and turns out [illegible] carriages and sleighs per annum. Two water wheels supplies the motive power. Agent in Albany, New York, Jonathan [illegible], in New York City, Daniel B. Dailey, in Vermont, Col. [illegible] B. Dailey.

BRACKETTS, about five miles from Portsmouth, and thirty-six from Manchester; a country station on the Concord & Portsmouth Railroad.

BRADFORD, 27 miles from Concord, a station and town on the Concord and Claremont railroad. This town is watered by small streams, which principally rise from ponds, of which the largest is Todd's pond, lying in Bradford and Newbury. Its outlet forms the southern branch of Warner river. Many parts of Bradford are hilly. A large proportion of the town lies in a valley about three miles in width. Settled in 1771. Incorporated 1787. In 1858 there were in this town 308 ratable polls. Valuation $[illegible].

There were [illegible] horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep, valued at $[illegible]. Value of lands, $[illegible].

BRIDGEWATER 48 miles from Concord; 1[illegible] from Boston; 1[illegible] from Providence. A country station and town on the Boston, Concord and [illegible] Railroad. The soil of the town of Bridgewater is well adapted to grazing; and few townships in this vicinity exceed it in that respect. The first settlement was made in 1766, by Thomas Crawford, Esq. In 1858 there were 11[illegible] ratable polls. The valuation $[illegible], and the proportion on $1,000 of a State tax was [illegible] cents. There were 1[illegible] horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep valued at $[illegible]; value of lands, $[illegible].

BRISTOL, 13 miles from Franklin, a station on the Northern New Hampshire Railroad and [illegible] from Concord. Bristol is situated at the termination of the [illegible] branch. The town is hilly and in general has a good soil. The village of Bristol is at the confluence of the Newfound stream, two miles long and 100 feet wide, and Pemigewasset river. Bristol was taken from Bridgewater and New Chester and incorporated in 1819. The first settlement was made in 17[illegible].

H[illegible] & Co. commenced business in 18[illegible]. They occupy a building [illegible] x [illegible], three stories high, for the manufacture of plaid shirting flannel. They employ [illegible] hands, run two sets cards, 1,[illegible] spindles and [illegible] broad [illegible] looms. Consume [illegible] pounds of wool per month, and turn out about 1[illegible] yards flannel. They use a Warren water wheel of [illegible] horse-power to drive their machinery. Goods manufactured sold by Messrs. Parker Wilder & Co., of Boston and New York.

F[illegible]'s Tannery, L. K. F[illegible], proprietor, established November 1[illegible], 18[illegible]. Occupies a building 40 x 1[illegible] feet, for the manufacture of upper leather. Employs from [illegible] to 10 hands; produces 1[illegible] sides per week, and does a business of $[illegible] per annum. Water power is used to drive the machinery, and also has a boiler for heating and drying purposes.

CANAAN, 18 miles from White River Junction and [illegible] from Concord, a village and town on the Northern New Hampshire Railroad. The only stream of consequence is the Mascomy, which rises in the northwest part of Dorchester, and after a meandering course of eight or ten miles falls into Mascomy pond in Enfield. The Indian stream empties into the Mascomy near the center of the town. Heart pond, so called from its form, is situated in the center of the town and upon a swell of land so elevated that at a distance it presents the appearance of a sheet of water on a hill. It is about five hundred rods in length and two hundred in width, surrounded by a natural mound or bank of sand. The mound is from five to ten feet high. Besides this there are Goose, Clark's, Mud and Bear ponds. The land is not so broken as in some of the adjoining towns. There is but little not capable of cultivation. The soil is naturally fertile. The town was settled in 1766. In 1858 there were 4[illegible] ratable polls in this town. Valuation $[illegible]. There were [illegible] horses and mules, valued at $[illegible]; 1,[illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep, valued at $[illegible]. Value of lands $[illegible]. The town has [illegible] churches, [illegible] school houses, two hotels and one academy. Population about 2,[illegible].

William [illegible], stone-bound manufacturer, commenced business in 18[illegible]. The size of buildings are as follows: mill [illegible]; [illegible] building for sawing stone [illegible] feet; [illegible] feet, and [illegible] feet, all one story in height. On the premises there is a two story dwelling-house and stable. He employs 10 hands and produces [illegible] tons of stone bound yearly. Water power is used. There is one [illegible] horse power [illegible] boiler [illegible] feet long and [illegible] inches in diameter, [illegible] [illegible], [illegible] engines for heating [illegible], 1 [illegible], 1 press and 1 [illegible].

CANDIA, 29 miles from Portsmouth and 12 from Manchester, a small village in the town of Candia, on the Concord and Portsmouth Railroad. The soil of this town is poor, but the industry of the inhabitants has made its cultivation profitable. The town is elevated and commands an extensive view of the [illegible] country. The inhabitants are mostly farmers, and are generally wealthy. In 1858, there were in this town [illegible] ratable polls. Valuation, $[illegible]; proportion on $1,000 State tax, $[illegible]. There were [illegible] horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep, valued at $[illegible]; value of lands, $[illegible].

CANTERBURY, 10 miles from Concord and [illegible] from Boston, a country station and town in Merrimack county, on the Boston, Concord and [illegible] Railroad. The town through has [illegible] in [illegible]

uneven, the soil is generally good, the more uneven parts affording excellent pasturage. Settled in 1727. In this town, on an elevated and beautiful situation, is the village of the "Shakers." The settlement is divided into families. They have a meeting house, open at all times of public worship, where any discreet and decent spectator is allowed to attend. They have a "Trustee's office," where all their public business is transacted, and where visitors are first received on their visit to the society. In 1868 there were 284 ratable polls, and $588,558 valuation. The proportionate tax on $1,000 for the State was $3.95. There were 257 horses and mules, valued at $16,144, 1,320 cows, oxen and neat cattle, valued at $45,137; 2,796 sheep, valued at $5,980. Value of lands, $391,954.

CHARLESTOWN, 8 miles from Bellows Falls and 122 from Boston, a village containing 3,000 inhabitants and three churches, and town, on the Connecticut River railroad, and on the Connecticut river. The only rivers in Charlestown are the Connecticut and Little Sugar rivers. In the former there are three islands within the limits of the town, the largest of which contains about ten acres and is called Sartwell's Island. The others contain about six acres each, and have a rich loamy soil. The soil of the town is extremely various. The town was incorporated July 2d, 1753. In 1868 there were 401 ratable polls in this town; the valuation was $1,037,320. There were 323 horses and mules valued at $32,735; 1,015 cows, oxen and neat cattle, valued at $50,772; 7,890 sheep, valued at $21,720. The value of lands, $597, 722.

CLAREMONT, 18 miles from Bellows Falls, 126 from Burlington and 132 from Boston, on the Connecticut River Railroad, and on the Sugar river, 2 miles from the station. The water privilege here is large, there being 153 feet fall within three-fourths of a mile from the village. Claremont contains 3,500 inhabitants, five churches, one national and one savings bank.

The town, bordering on the Connecticut river, is a fine undulating tract of territory, covered with rich gravelly loam, converted into the best meadows and pastures. The hills are sloping, and crowned with elegant summits. The agricultural products are large and valuable. Settled in 1762. In 1868 this town had 969 ratable polls. Valuation $2,286,465. There were 560 horses and mules, valued at $53,334; 1,500 cows, oxen and neat cattle, valued at $71,309; 6,493 sheep, valued at $16,801. Value of lands, $1,162,986. The town is six miles square. Population, 6,000. Have one High school, twenty-four district schools, and two newspapers.

Their railroad facilities will soon be increased by the extension of the Concord and Claremont railroad. It now comes from Concord, the State capital, 50 miles east, to Bradford, 25 miles, and it was proposed to commence early in the spring of 1869 to complete the road to this town, to connect with the Sullivan, and the town gives $500,000 towards the enterprise, and other towns through which it passes, give in like proportion.

The Monadnock Mills, incorporated in 1846, with a capital of $100,000; in 1854 the capital was increased to $200,000. The officers of the company are S. B. Rindge, President, F. J. Parker, Treasurer, and D. W. Johnson, Agent. Manufacturers of four-quarters, ten-quarters, eleven-quarters and twelve-quarters sheetings. In 1856 they bought the mill just above on the opposite side, then known as the Sunapee mill, which at that time was running on cotton goods. They then extended their business, running this mill on the same styles of goods until 1864, when they altered this into a woolen mill, making flannel goods; running 3 sets, 1,880 spindles, 16 looms, employing 50 hands and turning out 6,000 yards woolen flannels per month. The motive power is furnished from a 4 feet Tyler wheel. For heating the mill they use a tubular boiler, made by Kendall & Roberts. Their cotton factories consist of No. 1 mill, 124x44, five stories and attic; No. 2 mill, 124x52, five stories and attic; joined together by a picker house, 55x62, one story and attic; in the rear the boiler house, 55x20, one story, containing two tubular boilers, made by Roberts & Kendall and J. J. Walworth & Co. Weaver's room attached to mill No. 1, 37x57, one story and attic; cloth room 32x32, two stories; repair shop, 46x25, two stories; blacksmith's shop, 25x22, one story; these buildings are built of brick, with slate or tin roof. The cotton storehouse is situated below mill No. 2, a two story frame building, 55x30. These buildings are situated on the left bank of the river, near the centre of the village. They employ 400 persons in this cotton mill, running 15,000 spindles, 111 wide and 200 narrow looms, using 2,300 pounds of cotton per day, producing 140,000 yards four-quarters and 130,000 square yards of different widths per month. From two Tyler wheels, situated one in each mill, they derive their motive power. They have an Atlantic Engine Works engine, in case of low water. The buildings are heated by steam from the boilers.

Sugar River Paper Mill Company, incorporated in 1866, capital $100,000, John Tyler, President, J. L. Farwell, Treasurer, J. T. Emerson, Agent, manufacturers of book and newspaper. Their mill is situated on the left bank of the river, about three-quarters of a mile below the Monadnock Mills, the road being on a level with the attic of the main mill, which is 106 feet long, 44 feet wide, two-story and factory attic. The machine room adjoining the main mill, which is also 106x44, but one-story. L. to main building, 44x40, two-stories and attic, containing the bleach bins. The buildings are heated by steam from two tubular boilers made by Harrison Loring. By the construction of the mill the stock does not pass through the same room twice. It is taken in from the road into the attic of the main mill, passing over one of Fairbank's patent scales, where it is all weighed, and then lowered into the second story, where they have girls to sort it, then carried into the cutting room, adjoining the sorting room, where it is cut, and then dusted through a scuttle into the bleach bins, which are on the first floor, adjoining the engine room, then into the washers, then conducted into the basement, then brought up by an elevator to the engine beaters, which are on the first floor adjoining the machine room; from the beaters it is carried into chests, and pumped into the machine. When it first reaches the machine, a stranger to the business would ask, how can they make paper out of that water? but on closer inspection, they would see a fine wire seive, which, from its continual right and left motion, draws most of the water off, and the pulp, after passing this seive, comes out on to a cloth, which running over and under through several large and small rollers, (which is regulated to the size and thickness of the paper required), begins to look like paper, and by the time you have reached one-third the end of the machine, the steam is fast drying the paper, and at the end they have the cutters revolving, which cuts the paper in any desired size. From the machine room it is taken into the finishing or packing room, where it is got ready to be shipped. They employ twenty men and fourteen females. The capacity of their mill is about two tons per day.

They use a four feet Tyler wheel, under 23½ feet head, to drive their rag-cutters, duster and engines.

They have two 46 inch and one 36 inch washing engine, and three 36 inch beating engines.

Their paper machine, which is a four-driers 72 inch, is driven by a 24 inch Tyler wheel, under the same head as the other 23½ feet.

They use a rotary bleacher, with capacity of bleaching seven ton rags per day.

SULLIVAN MACHINE CO. Business established by the present firm Jan. 1st, 1869, (J. P. Upham & Co.) The buildings consist of machine shop, foundry, carpenter and blacksmith shop, lumber house, etc. Manufacture stone dressing machinery, Tyler water wheels, water wheel governors, and all descriptions of machine and mill work. Employ fifty hands. Two turbine water wheels, [illegible] and four feet diameter drive their machinery.

THE CLAREMONT MANUFACTURING CO., the oldest corporation in the town, was incorporated in 1832, for the manufacture of news, book and colored paper. The main building occupied by them is 100 x 50 feet, with an ell 60 x 30 feet, and a storehouse 40 x 40 feet. The stone house 40 x 30 feet. They employ from 75 to 100 hands, producing daily 1,000 books and 1,200 pounds of paper. They consume one and one-half tons of stock daily, doing a business of $100,000 per annum. They use Rice, Fessen & Co.'s Fourdrinier 72 inch machinery, also 100 horse water-power. They are also book manufacturers and stereotypers.

GEO. L. BALCOM commenced business in 1857 for the manufacture of black doeskins. Employs twenty-five hands, runs twelve looms, producing 225 yards per day, doing a business of $80,000 per year. The selling agents for Mr. B.'s goods are Mackintosh, Greene & Hersey, Boston.

A. BRIGGS & CO. Business established in 1862. They occupy a four story brick mill, with stone rock, 80 x 48 feet. Employ forty hands, run 2,000 spindles, and 60 looms, manufacture 4-4 light drillings, 44 picks and 48 reeds, run on an average 40 yards, produce 1,800 yards daily, and do a business of about $80,000 per annum. A Tyler water wheel, 4 feet in diameter, 64 horse-power, runs the machinery. Arnold Briggs, resident agent; Pierce Hardy & Co., selling agents, Boston, Mass. This establishment is situated on the Sugar River, four miles from the Connecticut, of which it is a tributary. It takes its rise in Sunapee Lake, 80 miles east, and the said lake is an immense reservoir, belonging to a corporation composed of the mill owners in this and the adjoining town of Newport, through which runs the river. There are numerous waterfalls all the way along, and excellent mill sites and a tremendous amount of undeveloped power. The lake is nine miles long, three miles wide, and can be drawn down 10 feet, affording water enough to run all the works on the river three to four months without rain.

COLD RIVER, one mile from Bellows Falls, 85 from Fitchburg and 113 from Boston. A flag station in the centre of a wealthy farming country on the Cheshire railroad, and in the town of Walpole.

CONCORD, 59 miles from Portsmouth, 18 from Manchester, 75 from Boston; capital of the State in 1816, and the shire town of Merrimack county in 1823; obtained a city charter in 1853, and adopted it March, 1853. Population in 1775, 1,052; 1790, 1,747; 1820, 2,838; 1840, 4,903; 1860, 10,896; 1870, 12,241; 1880, about 14,000. The city is built on elevated ground and commands a fine view of the surrounding country. The State and Court Houses, besides several business blocks on the main street, add to the appearance of the city. There are 15 churches, 5 banks, and 4 newspapers. The soil of this city, which occupies several hundred acres of land for farming purposes is good. Large masses of granite suitable for the purposes of building, exist, and form a most important feature in the business of the city. Many of the large and elegant buildings on Broadway, New York, and in other parts of that and other cities are built of granite from here. Among the early inhabitants and distinguished citizens of this town may be mentioned the following: Rev. Timothy Walker, Dr. Philip Carrigain, Hon. Thomas W. Thompson, Sir Benjamin Thompson (better known as Count Rumford), John Farmer, Esq., an eminent antiquarian and genealogist, and others. In 1869 there were 3,117 taxable polls, and the valuation was $8,[illegible]; the proportion on State tax of $1,000, $44.11. There were 1,045 horses and mules, valued at $[illegible]; 1,871 cows, oxen and other cattle, valued at $79,811; 2,255 sheep, valued at $8,192; value of lands $3,791,441.

MANUFACTURERS.

THE largest manufactory of coaches, wagons and supplies in the world is that of ABBOTT, DOWNING & CO., who have been established many years. Their establishment comprises many large and spacious buildings. They cut and season their own lumber, by which fact they claim a superiority for their work over others. They have a large trade, extending even to Australia, Japan and California, with depositories in our largest cities.

JAMES R. HILL & CO. occupy a building 44 x 120, three stories brick, on Main street, for the manufacture of harnesses, commencing here in 1840. They employ 75 persons and do a very large business, sending harnesses to Australia, California and all over the world.

DANAHER & DAVIS established January 1, 1869, for the purpose of quarrying and hammering granite of all descriptions, for monuments and building stone. They employ about 40 hands, manufacturing plain and ornamental work.

PRESCOTT BROTHERS, manufacturers of organs, melodeons and piano stools, claim for their firm the honor of being the longest established manufactory of the kind in the United States. Their father, Abraham Prescott, began the manufacture of bass-viols in Concord, in February, 1831, having for twenty years previous to that time been engaged in the bass and double bass viol manufacture. The firm became A. Prescott & Son in 1845, and Prescott Brothers in 1850, and still continues.

Their business, though a modest one, not exceeding [illegible] upon the average, is still widely known throughout the west in particular. They manufacture the various styles of melodeons and organs in all necessary styles, and some three thousand piano stools in addition. Their office, warerooms, and a portion of their business, occupy the third upper stories in "Exchange Building," together with the second floor of the adjoining building, while their factory, machinery, &c., are in a large brick building near the Concord railroad depot, about a third of a mile distant.

A sixty horse-power engine supplies them and two other firms with power. One of their workmen has been constantly employed by them and their predecessor for thirty-three years, and their location has been unchanged for the past [illegible] years, except [illegible], and that only temporarily. Their business is rapidly enlarging.

J. HAYES occupies one room for the manufacture of hats, commencing in 1856. He employs four persons, runs one hat machine, and produces 75 hats per day.

THE CONCORD RAILWAY CO. Capital $[illegible]. A. B. Stearns, agent. Employs 100 persons, and does a business of $400,000 annually.

LEWIS DOWNING & CO. are bedstead and plain furniture manufacturers, near the depot. The main building is 40 x 80 feet, four stories, wood. They commenced in 1845, [illegible]

ing to the new manufactory in 1867. Employ 60 persons, use $1,000,000 feet of lumber annually, and use an engine of 60 horse-power, G. W. Davis & Co.'s make.

W. P. Ford & Co. occupy eight buildings for the manufacture of stoves and plows, commencing here about thirty years ago. They employ thirty persons.

One quite extensive manufactory of wagons here is that of Harvey, Morgan & Co., who occupy a building 78 x 40 feet, four stories, another 60 x 30, two stories, at 58 Main street, commencing here in 1853. Employ 50 persons, and produce 250 wagons per year.

Andrew Bunker occupies two floors for the manufacture of doors, sash and blinds, commencing here in 1854. He employs 8 persons and does a business of $10,000 yearly.

Dunklee & Tilton occupy one floor at 60 Main street, for the manufacture of irregular planers, &c., commencing here in 1866. They employ 12 persons and do a business of $18,000 yearly.

Ray, Welcome & Co. occupy one building for the manufacture of buggies and express wagons. They commenced in 1867, as successors to Downing & Sons. Employ 15 persons.

Ford & Kimball are the largest iron founders here. They manufacture both brass and iron castings, car wheels and iron work for buildings and fences, commencing here in 1865 as successors to Ford & Co., by whom the business was established. The works are located on Main street, near the freight depot, and comprise an iron foundry 222x 45, warehouse 150x30, pattern house, 60x40, all one story. They employ 50 men and melt 6 tons of iron daily.

Moses Humphrey established business in 1843. He occupies a two-story building 70 x 35 feet, with basement for sawing out timber. Employs ten hands in the mill usually, but when getting in timber and sawing it employs some five or six additional men. Manufactures kits, of which he produces from 70,000 to 75,000 per year, and does a business of about $17,000 per annum. His machinery is driven by a water wheel of 25 horse-power.

Contoocook, 11 miles from Concord, a station on the Concord & Claremont Railroad, at the junction of Contoocook River Railroad, in the town of Hopkinton.

Morrill & Livingston, established 1864. They occupy one building for the manufacture of Indigo blue and mixed flannels. They employ twelve hands, and produce 90,000 yards of goods per annum.

County Farm, 91 miles from Concord, 163 from Boston, 206¼ from Providence. A flag station on the Boston, Concord & Littleton Railroad, and county seat of Grafton County; a small village.

Danbury, 31 miles from White River Junction and 38 from Concord, a village and town on the Northern New Hampshire Railroad. The town of Danbury is of the form of a diamond. The town is generally hilly. The eastern section is watered by Smith's river. It was settled in 1771. Incorporated June 18th, 1795. There were 226 ratable polls in this town in 1868. 167 horses and mules, valued at $11,589; 895 cows, oxen and neat cattle, valued at $28,774; 1,784 sheep, valued at $3,398. Value of lands, $147,871. The village contains three churches, viz.: Congregationalist, Calvin Baptist and Christian.

W. P. Clough, established business in 1860. Manufactures boot and shoe leather. He occupies a building, 80x36 feet, one-story with basement; also connected with the main building is a building for storing bark, 100x30 feet. He employs six men, consumes annually about 250 cords of hemlock bark, and makes into upper leather about 3,000 sides, the business alone amounting to $20,000 per annum. His machinery is run by a three-feet Russel's water-wheel of 20 horse-power, and a two-feet turbine wheel of 10 horse-power.

Davis', 23 miles from Dover, and 5½ from Alton Bay, a station on the Dover and Winnipissiogee Railroad.

Derry, 15 miles from Lawrence, and 11 from Manchester, a station and town on the Manchester & Lawrence Railroad. This is a fine grazing township, taken from Londonderry in 1828. The soil is very productive. In 1868 there were 396 ratable polls. Valuation $758,147; 270 horses and mules, valued at $14,110; 1,018 cows, oxen and neat cattle, valued at $28,628; 353 sheep valued at $842. Value of lands $425,703.

Dover, 68 miles from Boston, 43 miles from Portland, 111½ miles from Providence, R. I., was settled in 1623 and incorporated a city in 1855. It is situated on the falls of the Cocheco river, which runs into the Piscataqua. The falls have several pitches, one of which is 40 feet perpendicular, affording a vast water power which has been applied to manufacturing purposes. It was one of the first settled towns in the State. At present it has a population of about 10,000. The valuation of real and personal state in 1868 was $5,018,320, and the number of voters 2,070. Number of schools 33, and the number of scholars attending school about 2,000. The Franklin Academy is located here. The city is on the Boston and Maine and the terminus of the Dover and Winnipissiogee Railroad.

The first meeting house erected here, which was the first erected in the State, was built in 1634; at present there are 11 churches in the city, of which 2 are Congregational, 2 Freewill Baptists, 1 Episcopal, 1 Methodist, 1 Baptist, 1 Universalist, 1 Unitarian, 1 Society of Friends, and 1 Catholic, and 2 Savings Banks. In 1868 there were in the town 673 horses and mules, valued at $55,495; 1,052 cows, oxen and neat cattle, valued at $59,125; 504 sheep, valued $1,427. Value of land, $2,259,000.

The principal streams of Dover are the Cocheco and Bellamy Bank, or Back river, They take a S. E. course through the town, and unite with other waters to form the Piscataqua. The Cocheco, or Quocheco river, has its rise from several small streams in New Durham, which unite in Farmington, and in Rochester receives the Isinglass, a tributary, and thence passes through Dover into Newichwannock, or Salmon Falls river, the principal branch of the Piscataqua. Passing over this town in any direction the traveller finds no rugged, mountainous nor extensive barren plains, but occasionally ascends gentle swells of land, from the height of which the eye meets some delightful object, a winding stream, a well-cultivated farm, or a distant village.

Wiggin & Stevens occupy a three story wooden building, 130 x 30 feet, used for the manufacture of sand, flint and emery paper; also occupy seven other buildings used in the manufacture of glue, the whole covering an area of about four acres of ground, and located on the Gulf road, about

NEW ENGLAND FLINT.

WIGGIN & STEVENS,

Manufacturers of

Glue; Flint, Emery, Sand and Match Papers.

Manufactory at the Gulf. **DOVER, N. H.**

WM. S. STEVENS. **RUSSELL B. WIGGIN.**

COCHECO GLUE.

three-quarters of a mile from the Boston and Maine railroad station. They commenced business in 1838, and have twenty employees, producing annually about 20,000 reams of sand paper, etc., and 200,000 pounds of glue. They have in use a quartz crushing machine, which crushes all the quartz used in making their sand paper, and grinds about a ton each day. Their machinery is driven by an engine of 12 horse power, built by William Burdon, of Brooklyn, N. Y., with a tubular boiler, 72 horse-power, built by the Swanscott Machine Co., of South New Market, N. H., which, in addition to supplying the engine with steam is used for drying purposes. This firm have an agency with L. D. Jones, 46 Cliff street, New York city, and do business amounting to $100,000 per annum.

Richard Rothwell occupies a two-story wooden building, 30 x 25 feet, situated on Portland street, for the manufacture of Sanborn's improved water wheel, and Gage's patent brick machines. Also, mill work, shafting, &c. Commenced business in 1858, and has five employees. Makes about 15 brick machines, and has a capacity for producing 50 water wheels per annum. The machinery is driven by an engine of seven horse-power, built by the Swanscott Machine Company, of South New Market, N. H.; also, are supplied with steam power from engine in building adjacent.

The New Hampshire Flax Mills, Eaton Hackett, proprietor, occupy a three story wooden building, 30 x 32 feet, located on Portland street, for the manufacture of carpets, hurlaps, twine, &c. They commenced business in 1863. Employ 60 hands and produce 1,000 yards of carpets, 1,400 yards of hurlaps, and 1,000 pounds of twine, per week; running one picker capable of picking 900 pounds per day; two carding machines, four spoolers, one dresser, twelve looms, and 282 spindles. Also, have a dye-house attached for dyeing purposes. Their machinery is driven by an engine of 30 horse-power, with three tubular boilers 75 horse-power combined, built by the Swanscott Machine Company, of South New Market, N. H. Do business of $100,000 per annum.

Alexander Strong & Co., manufacturers of boiler and pump boots and shoes, occupy a four-story wooden building, 40x60 feet, located on the corner of Third and Chestnut streets. They commenced business in 1868, employ from sixty to one hundred hands, turn out about 225,000 pairs per year and do a business amounting to about $200,000. Their machinery is driven by an engine of one horse-power, with a tubular boiler of twelve horse-power, built by the Swanscott Machine Co., South New Market, N. H. T. J. Sperling, agent, at Dover, N. H. Office and salesroom Nos. 37 and 39 Pearl street, Boston, Mass.

J. H. Randlett occupies a two-story wooden building, 52x60 feet, located at No. 102 Central street, for the manufacture of sleight and carriages of every description. Commenced business in 1865, and gives employment to twenty hands.

C. E. & S. C. Hayes occupy a three-story wooden building, located on the corner of Fourth and Chestnut streets, for the manufacture of men's and women's brogans. Commenced business in 1847. Give employment to sixty hands, turn out about 75,000 pairs per year, and do business to the amount of $114,000. Office and salesroom No. 72 Pearl street, Boston, Mass.

Palmer & Gould, manufacturers of gents', ladies', misses' and children's school boots and shoes. They occupy a four-story wooden building, 22x50 feet, located at No. 4 Orchard street. Commenced business in 1867. They employ fifty hands, turn out about 20,000 pairs and do business to the amount of about $55,000 per annum.

David Hovey & Co., commenced business in 1865. They occupy a three-story wooden building, 30x50 feet, also a two-story wooden building, 16x50 feet, located at No. 3 Orchard street, where they employ from 50 to 75 hands in the manufacture of heavy balmorals, brogans and plough shoes, for men's youth's and boys' wear. The number of pairs made per year is about 30,000, and the amount of business done about $80,000 worth.

The firm of J. E. Goodwin & Co., No. 8 Fourth street, commenced the manufacture of men's, boys' and youth's boots, shoes and brogans, in the year 1866. They give employment to about 100 hands, make about 150,000 pairs per year and do business to the amount of about $200,000 per annum. Their steam power is furnished by an engine of 5 horse power, built by the Ripon Cabinet Engine Co., of New York. Their goods are sold principally to the Southern and Western trade. Office and salesroom No. 81 Pearl street, Boston, Mass.

The Dover Iron Foundry, owned and carried on by the Somersworth Machine Co., was incorporated in 1846, and occupy a wooden building, 50x75 feet, situated about one-fourth of a mile from the railroad station, and manufacture sleighs, castings and general machinery, employing about 20 hands and producing 1½ tons of castings daily. M. C. Burleigh is Agent, and O. H. Lord, Treasurer, of this company. Their office is at Great Falls, N. H.

The Dover Carriage Factory, George O. Moore & Co., proprietors, occupy a 3-story wooden building with a blacksmith shop and workhouse attached, situated on Tremont street, for the manufacture of carriages and sleighs of every description. They commenced business in October, 1866,

and have 16 employees, producing about 75 carriages and 40 sleighs per annum, doing business of $50,000 per annum.

Charles E. Everett & Co., manufacturers of carriages and sleighs; commenced business in 1825, and have 12 employees. They occupy a two story wooden building 40 x 30 feet with an L 45 x 30 feet; also a warehouse 30 x 30, situated on Silver street. They produce annually about 50 carriages and do a business of $10,000.

J. B. Folsom, occupies a 3 story wooden building 142 x 42 feet, with outbuildings, store-houses, &c., situated on Locust street, and manufacture floor oil cloths, of which they produce annually about 130,000 yards, employing 20 persons and doing business of $60,000.

Dover Brass Foundry, T. H. B. Hough, proprietor, commenced business in January, 1867. He occupies the lower floor of a two story wooden building 50 x 36 feet, located at No. 5 Main street, and manufactures brass and composition castings, Babbit's metal and weather vanes.

DURHAM, 62 miles from Boston, 49 miles from Portland, 105½ miles from Providence, is situated on the Boston and Maine Railroad, and was incorporated May 13th, 1732. It has a population of 1,600, contains ten schools and two churches, one Congregational and one Christian. The number of voters is 300. The town is six miles long on two sides, and four miles on the other two sides. Principal business, agriculture. Contains one post office.

The situation of this town, upon the Piscataqua and its branches, is favorable, both as to water power and transportation. Oyster river, one of the branches of the Piscataqua, issues from Wheelwright's pond, in Lee, and after running nearly its whole course in Durham, falls into the main river. Upon both sides of Oyster river a deep loam prevails, which is peculiarly favorable to the production of grasses, of which very heavy crops are cut. Durham was originally a part of Dover. Maj. Gen. John Sullivan, of the Revolutionary army, was a resident of this town, and died here Jan. 23, 1795. In 1868 there were in this town 341 ratable polls. Valuation, $691,134. There were 204 horses and mules, valued at $14,760; 760 cows, oxen and neat cattle, valued at $28,524; 449 sheep, valued at $1,240. Value of lands, $359,098.

EAST ANDOVER, 44 miles from White River Junction, and 25 from Concord, a station in the town of Andover, on the Northern Railroad of New Hampshire.

EAST CONCORD, 2 miles from Concord depot, and 74 from Boston, a small village, containing two churches, situated in the city limits of Concord, on the Boston, Concord and Littleton Railroad.

EAST KINGSTON is a small town of about 700 inhabitants, in the county of Rockingham. The soil is of an excellent quality, and well adapted to the cultivation of grain and grass, the same being the principal employment of the inhabitants. In the town there are 151 voters, four schools, which are kept about ten months in the year; the number of scholars is 120. There is one church building but no society, and neither minister, lawyer or doctor in the town. The post office is at Titcomb & Clark's store, near the railroad depot, Joseph C. Sargent, post master.

East Kingston was incorporated Nov. 17th, 1738. The first settlers were Abraham and William Smith. Located on the Boston and Maine Railroad, 45 miles from Boston in a northerly direction. It is 42 miles south-east by east from Concord, the capital of the State, and 20 miles south-south-west from Portsmouth. The Powow river crosses the south-western part of the town. Valuation in 1868, $304,050. Number of ratable polls 151; 96 horses and mules, valued at $6,530; 331 cows, oxen and neat cattle, valued at $18,014; 269 sheep, valued at $838. Value of lands, $186,316.

H. L. Rowell, boot and shoe manufacturer, occupies a two story wooden building, 24 x 30 feet, located near the depot. He commenced business in 1866. Employs forty hands, turns out about 15,000 pairs per year, and does a business of about $20,000 per annum.

George W. Edney, manufacturer of shoes and boots of every description, established the business in 1865. He occupies a building 50 x 30 feet, employs twenty-five workmen, and does a business of $27,000 yearly.

EAST HAVERHILL, 79 miles from Concord, 151 from Boston, 194½ from Providence. A small village in the town of Haverhill, on the Boston, Concord and Littleton Railroad, containing one church.

Messrs. Joseph A. & Alonzo F. Pike, manufacture annually nine thousand boxes of scythe and wet stones. The "Diamond Grit," or best quality stones are packed a quarter gross to each box. "The Indian Pond," or second quality, are packed in half gross boxes. Two thousand boxes have been sent to England since the first of January. A large lot went to Scotland last year. The Messrs. Pike employ 40 hands in summer and sixteen in winter. They have three mills, all on the Oliverian brook. The quarry is said to be inexhaustible.

EAST LEBANON, nine miles from White River Junction and 60 from Concord. A station in the town of Lebanon, on the Northern New Hampshire railroad.

EAST WEARE, 16 miles from Manchester. A station in the town of Weare, on the Manchester and N. Weare Railroad.

EAST WESTMORELAND, 50 miles from Fitchburg and 14 from Bellows Falls. A small village, containing one church, situated about one-eighth mile from the station. The inhabitants are mostly engaged in agricultural pursuits. Situated on the Cheshire railroad, in the town of Westmoreland.

ENFIELD, 11 miles from White River Junction and 58 miles from Concord, a village and town on the Northern Railroad of New Hampshire. The surface of the town is diversified with hills and valleys, and watered by a variety of ponds and streams. Mascomy pond, which has acquired from travellers the appellation of Pleasant pond, is a beautiful collection of water four miles in length and of various breadths, interspersed with islands and checkered with inlets. The hills gradually rise, one above another, for some distance from the pond. Mountain pond on the summit of Mount Calm, is

200 rods long and 100 wide. The town was formerly called Rollins, and was incorporated July 4th 1761. In 1868, there were 425 ratable polls in this town, the valuation was $770,290. There were 265 horses and mules, valued at $29,506; 907 cows, oxen and other cattle, valued at $42,800; 6,741 sheep, valued at $16,867. Value of lands $363,619.

The village has a population of about 600, three churches, two woolen mills, large tannery, two saw mills, one bedstead factory, one very large gristmill, three stores, one restaurant, two shoe shops, one photographer, blacksmith shops, two livery stables, one paint shop, two meat markets, apothecary and variety store. The hotel was burned about a year since and has not been rebuilt. There is one physician, no lawyer or sheriff.

SHAKER MILLS. Dodge, Davis & Williams, commenced business June, 1865, for the manufacture of Shaker flannel and men's Shaker half hose. They occupy a two story building 100x40, situated near the depot, and employ 50 hands. Their machinery is driven by a turbine wheel under 12 feet fall.

HAYES & DAY. In 1864, this firm commenced the manufacture of plain Shaker flannels, &c. They run 2 sets machinery and 8 looms; employ 20 hands; consume 65,000 pounds of wool, doing a business of $75,000 per year.

EPPING,

18 miles from Portsmouth and 25 miles from Manchester. A small village, containing three churches in the town of Epping, Rockingham County on the Concord and Portsmouth Railroad. This town contains 12,700 acres, being nearly 20 square miles, the soil in general is very good, and well suited to raise the various productions that grow in the State. The Patuckaway empties into the Lamprey river at the west, the latter running through the whole length of the town. The North river runs through the north part of the town. The average heat in this town, 44 and 1-12° for ten years, during the same time the average of rain that fell was 2 feet and 10 inches. Snow 4 feet 7 inches. The number of ratable polls in this town in 1868, was 341. Valuation, $668,212. Proportion on $1,000 State tax, $2.81. There were 199 horses and mules, 872 cows and oxen and 650 sheep. Value of lands, $350,192.

EXETER,

50 miles from Boston, and 108 from Portland, on the Boston and Maine Railroad. Has a population of 3,600, and contains 9 churches, of which 2 are Baptist, 2 Congregational, 1 Methodist, 1 Episcopal, 1 Christian Baptist, 1 Unitarian and 1 Advent. Also has one Bank and one Savings Bank. The Phillips Academy, founded in 1781, and the Robinson Female Academy are located here. There are two hotels, the Squamscott House and American House.

The soil of Exeter is generally good. The settlement of Exeter was commenced in 1638 by John Wheelwright, and others. This town has at all periods of its history possessed eminent and useful men, and many of the first lawyers, jurists, statesmen and scholars have received their early education at its literary institution. John Phillips, LL. D., was the founder of Phillips Academy, and at his death in 1795 bequeathed to the institution a large portion of his estate. Benjamin Abbott, LL. D., principal of Phillips Academy for over fifty years, Hon. Samuel Tenney, M. D., and M. C., Gen. Nathaniel Peabody, Hon. Nicholas Gilman, Gen. Nathaniel Folsom, Hon. Jeremiah Smith and Hon. John Taylor Gilman.

In 1868 there were 715 ratable polls in the town. Valuation, $1,777,868. There were 261 horses and mules, valued at $27,594; 172 cows, oxen, and neat cattle, valued at $27,897; 476 sheep, valued at $1,963. Value of lands, $441,540.

THE EXETER IRON FOUNDRY, Carlisle, Rollins & Tilton, proprietors; occupy a frame building 75 x 60 feet with out-buildings, &c., located near the railroad station, and manufacture castings of every description. They commenced business Nov. 1st, 1868, have 12 employees and melt about 300 tons of iron per annum, doing business of $25,000 per annum. Motive power furnished from engine in building adjacent.

DREW FOLSOM & Co., manufacturers of brass and composition castings, hydraulic rams, water gates, &c., occupy the upper floor of two story wooden building 120 x 40 situated near the railroad station. They commenced business in 1867, have 18 employees and consume annually about 30,000 pounds of composition. Motive power derived from engine in building adjacent.

E. S. & S. A. BROWN, commenced manufacturing carriage hubs in 1848. They occupy two brick buildings 70 x 45 feet, located on Pleasant street, and turn out about 15,000 sets of hubs, annually employing on an average 12 hands. A water-wheel of 20 horse power drives their machinery, the fall being nine feet.

EXETER MACHINE WORKS. In 1850 an incorporated company erected buildings, consisting of a machine shop, 160 x 50 feet, two stories high; one iron foundry, 130 x 70 feet, blacksmiths' shop, brass foundry, and other necessary buildings to carry on the manufacture of steam engines, machinery and bridge and iron fittings. The shops were all provided with new tools of the most improved kind for the several branches of manufacture, and when in successful operation gave employment to 150 hands. But meeting with severe losses they were obliged to sell out at a great sacrifice, when the machinery department was again started by William Burlingame, under its present name of EXETER MACHINE WORKS.

The works are driven by a 20 horse-power variable cut-off engine, supplied with steam from the comprehensive tubular sectional boiler of their own manufacture; the buildings of various sizes of brick being one of the specialties of the concern.

These boilers, from their mode of construction and the great amount of pressure which they are able to stand, render them safe from explosion in every sense of the word, as well as in economy of fuel and durability. Another branch of their manufacture is steam engines and turning lathes of every size for machinists and model workers and a great variety of wood working machinery.

The works are very conveniently located on the Boston and Maine railroad, so that freight can be loaded direct from the works into the cars.

EXETER MANUFACTURING COMPANY occupy a stone building 174 feet long, four stories and attic; two buildings, two stories and attic, 75x50 feet respectively. Employ 150 hands, manufacture 36 and 37 inch sheetings, No. 20 yarn, (60x70); run 8,000 spindles and 200 looms, consume 1,000 bales of cotton per annum and produce 5,000 yards per day. Steam and water power of about 120 horse combined runs the machinery. Capital stock, $150,000, 300 shares at $500. Dale Brothers, Agents, Boston, New York and Philadelphia.

FARMINGTON,

18 miles from Dover and 10½ from Alton Bay, a small village on the Dover & Winnipiseogee Railroad, in a town by the same name. This town was incorporated in 1798. The Cochecho

waters are in the northeast part of the town. The Blue hills or Frost mountains extend nearly through the town, under different names. In 1868, there were 588 ratable polls in this town. Valuation $874,577. The proportion on a $1,000 state tax was 5.87. There were 248 horses and mules, valued at $16,526; 1,147 cows, oxen and neat cattle, valued at $42,736; 1,158 sheep, valued at $2,966. Value of lands, $515,014.

Berry & Kimball occupy a two-and-half-story wooden building, 30x50 feet, located on Central street, for the manufacture of men's, youths and boy's brogans. Commenced business in the year 1867. Give employment to fifty hands, turn out about 75,000 pairs of brogans per year, and do business amounting to about $75,000 per year.

G. M. Herring occupies a three-story wooden building, 25 x 75 feet, located on Main street, for the manufacture of men's and boy's brogans. Commenced business in 1843. Employs 60 hands, turns out about 75,000 pairs per year, and does business amounting to $75,000.

J. F. Cloutman, manufactures men's and boy's brogans. Commenced busines in the year 1854. Employ 75 hands, turn out 100,000 pairs per year, and do business amounting to $125,000. The factory is a three-story wooden building, 28 x 60 feet, and is located on Main street. Office and salesroom, No. 54 Pearl street, Boston, Mass.

H. L. Roberts & Co. occupy a three-story wooden building, 25 x 50 feet, located on Main street, for the manufacture of men's and boy's brogans. They commenced business in 1859. Employ 100 hands, turn out about 1500 pairs per week, and do business amounting to about $75,000 per annum. Salesroom, 116 Pearl Street, Boston, Mass.

C. E. Johnson & Co. occupy a three-story wooden building, 35 x 70 feet, located on Main street, for the manufacture of men's and boy's brogans. Commenced business in 1865. Employ 200 hands, turn out130,000 pairs per year, and do business to the amount of $200,000 per annum. E. O. Curtis, Agent at Farmington, N. H. Office and salesrooms, No. 84 Pearl street, Boston, Mass.

Israel Hayes, manufacturer of wax and split brogans, occupies a three story building, 22 x 30 feet. He produces upon an average between 20,000 and 30,000 pairs shoes, and does a business of about $40,000 per annum.

F. Dane Grinnell & Co. George A. Jones, agent. This firm commenced the manufacture of brogans in 1868, occupying a three story building, 32 x 60 feet. Their office is situated at No. 69 Pine street, Boston.

FISHERVILLE, 7 miles from Concord, and 62 from White River Junction, a small village on the Northern Railroad of New Hampshire, within the limits of Ward 1, in the city of Concord. Population about 2,500. Contains four churches, viz.: Baptist, Congregationalist, Methodist and Catholic. The finest church is the one belonging to the Baptists, having a tower 150 feet in height, with a bell and clock. No banks in the village. Number of polls, 500. Valuation of real and personal estate, about $700,000. There were 175 men that enlisted in the army and navy from this village during the Rebellion. Of this number, thirty-six were killed or died in the service. There were five commissioned officers from this village, two of whom, Major Wm. I. Brown and Captain Leonard Drown, were killed. The village is situated at the confluence of the Contoocook and Merrimae rivers. There is a fall of 100 feet on the latter river, in one mile, affording ample power, which, comparatively is but little occupied.

H. H. & J. S. Brown commenced business in 1833. They now occupy two buildings belonging to the Contoocook Manufacturing and Machine Co. One mill is 300 x 48 feet, three stories and attic, with wheel-houses at each end, making in all 370 feet in length; the other mill is 96 x 42 feet, four stories, with basement and attic. They employ about 300 hands, have 17,782 spindles and 467 looms, and produce annually about 4,300,000 yards of printing cloths.

Almon Harris & Sons. In 1847 Almon Harris established the manufacture of all-wool flannels, and for several years back has been carried on by the above firm. They have four buildings. The mill building is 120 x 45, containing five sets woolen machinery. Employ 60 hands, and produce 1,600 yards daily, consuming 600 pounds wool. Their power is derived from the Contoocook river, on which they have a fall of sixteen feet. Faulkner & Kimball, of New York and Boston, are the selling agents.

H. H. Amsden & Sons, manufacturers and wholesale dealers in pine chamber furniture. The present firm of H. H. Amsden & Sons succeeded Caldwell & Amsden, Nov. 1st, 1868. The manufactory was established in 1853. Carry on the business of manufacturing "Pine Chamber Furniture," which they sell in the white, and which is afterwards painted and distributed to all parts of the country, a large portion of it going to California. They have twelve buildings in all. The main shop is 84 x 84 feet, five stories, with ell 36 x 36 feet, two stories; one shop 40 x 50 feet, two stories; one 30 x 36 feet, 2 stories, and one 40 x 60 feet, two stories. Also a building used as a stable for team horses, three small dry houses, two large lumber houses, and a store house at the railroad, 100 x 40 feet, with track to run cars up and load directly from the building. They employ 140 hands and manufacture from 1,000 to 1,200 chamber sets per month, using 3,000,000 feet of lumber annually. They use water power, and have sixteen feet fall. The water wheel they use was made by Messrs. Blake Bros., at Pepperel, Mass. They also have a lumber mill in connection with their business, situated about half a mile from their shops, where they saw out their own pine lumber from the log, sawing about 10,000 feet per day. Their shops are situated about half a mile from the Northern Railroad, in this village.

FITZWILLIAM, 77 miles from Boston, 27 from Fitchburg, and 15 from Keene, a village and town on the Cheshire Railroad. The village is situated two miles from the station, and contains two churches. Quite a little village has grown up around the depot, and bids fair to rival the other at no distant day. The town has two brooks, running in a southerly direction, which are the principal streams, (Camp and Priest.) The surface of the town is hilly; the soil is rocky and suitable for grazing and tillage. In 1868 there were 330 ratable polls in the town. Valuation $550,848. There were 225 horses and mules, valued at $17,280; 801 cows, oxen and neat cattle, valued at $37,049; 252 sheep, valued at $867. Value of lands $313,494.

FOGGS ROAD, 41 miles from Concord, 113 from Boston, 156½ from Providence, a country station on the Boston, Concord & Littleton Railroad, in the town of New Hampton. The soil of New Hampton, though the surface is broken and uneven is remarkably fertile, producing an abundance of most kinds of grain and grass. In 1763, General Jonathan Moulton having an ox weighing 1,400 pounds, fatened for the purpose, hoisted a flag upon his horns and drove him to Portsmouth as a present to Gov. Wentworth. He refused

to receive any compensation for his services, he requested and received a charter of a small gore of land of 10,[illegible] acres. This small gore of land received the name of New Hampton in honor of his native town. The number of ratable polls in this town in 1868 were [illegible]. Valuation, $1[illegible]. The proportionate state tax on $1,000 was $[illegible]. There were 2[illegible] horses and mules, valued at $1[illegible]; [illegible] cows, oxen and neat cattle, valued at $27,[illegible]; [illegible] sheep, valued at $4,2[illegible]. Value of lands, $[illegible].

FOUNDRY STATION,

a flag station on the Portsmouth, Great Falls and Conway Railroad, about half a mile from Salmon Falls.

The Somersworth Machine Co. Incorporated in 18[illegible]. Capital $[illegible]. Occupy a foundry, 1[illegible] x [illegible] feet, with other buildings, etc., covering about an acre of ground, located here. This firm manufacture stoves and hollow ware, mill castings and general machinery, and have thirty employees. Turn out about two tons of castings each day. An engine of 1[illegible] horse-power, built by the Swamscott Machine Co., of South Newmarket, N. H., drives their machinery. They also have foundries located at Dover and Salmon Falls, N. H. M. C. Burleigh is agent, and O. H. Lord, treasurer of the company.

FRANKLIN,

50 miles from White River Junction and 1[illegible] from Concord. A village and town on the Northern Railroad of New Hampshire. This town was incorporated in 182[illegible]. The confluence of the Winnipiseogee and Pemigewasset rivers in this town, form the noble Merrimac, creating on both streams an extensive and valuable water-power. In 1868 there were in this town 36[illegible] ratable polls. Valuation, $1,[illegible]. There were 2[illegible] horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $2[illegible]; 2,[illegible] sheep, valued at $[illegible]; value of lands, $[illegible].

A. W. Sulloway, manufacturer of shaker socks and flannels. This business was established in the spring of 18[illegible], under the name of Sulloway and Daniels, and changed in the spring of '[illegible] to its present name. He occupies for manufacturing purposes a three-story building, [illegible] x [illegible] feet, with basement and attic, and L, connected by boiler house and picker room, all built in the most substantial manner of brick, with a solid granite foundation. He runs three sets of the latest style woolen machinery, and when in full operation employs [illegible] hands, and turns out 300 pairs of socks and [illegible] yards of flannel per day. Pay roll about $[illegible] per month, or business done amounting to about $1[illegible] per annum. The mill is located upon a never failing stream, direct from lake Winnipiseogee. A [illegible] Whitney's turbine water-wheel supplies the power to run the machinery.

W. F. Daniell, paper manufacturer. This business was established in 18[illegible], by R. O. & J. L. Peabody, who were joined in 18[illegible] by J. F. Daniell, the father of the present proprietor, and has been run successively by Peabody & Daniell, Daniell & Peabody, and J. F. Daniell & Son up to 18[illegible], when Mr. Daniell, the present occupant, bought out his father's interest. The buildings occupied consist of one mill, two-stories, [illegible] x 7[illegible], with L [illegible] x [illegible], and one mill, three-stories, [illegible] x [illegible], with L [illegible] x [illegible], and boiler house [illegible] x [illegible] attached. Repair shop, four stock houses, dwelling houses, &c. Employ [illegible] hands, nearly equal proportion, male and female. Manufacture about two tons per day of book and newspaper, and do a business of $[illegible] per annum.

The machinery used consists of one [illegible]-inch Fourdrinier machine, seven engines, with bleachers, rotaries, &c., as connected. The mills are run by five water wheels of about [illegible] horse-power combined. Use one boiler of [illegible] horse-power for drying and heating purposes, [illegible] feet long, containing [illegible]-inch tubes, made by the Manchester Locomotive Works, and is a locomotive fire box boiler.

GOFF'S FALLS,

13 miles from Nashua and 4 from Manchester. A country station in the town of Bedford, on the Concord Railroad, between Nashua and Manchester.

The Devon Mills was incorporated 18[illegible], capital, $100,000. Waterman Smith, President, J. L. [illegible], Treasurer. They run [illegible] of Woolen machinery, twelve single Crompton looms and [illegible] knitting machines. They manufacture [illegible]. The fall is [illegible] feet. Henry D. [illegible], Agent.

GOFFSTOWN,

9 miles from Manchester, a village and town on the Manchester and North Weare Railroad. Piscataquog river, the tributary branches of which unite near the west line of the town, runs through the county in an easterly direction and falls into the Merrimac at Piscataquog village, opposite Manchester. On the rivers are considerable tracts of valuable land; back from the rivers [illegible] [illegible] places easy of cultivation. In 1868 there were in this town [illegible] ratable polls. Valuation, $[illegible]. [illegible] horses, valued at $[illegible]; 1,[illegible] cows, oxen and neat cattle, valued at $[illegible]; 1,[illegible] sheep, valued at $[illegible]. Value of land, $[illegible].

Hadley & Moore established business in this place in the fall of 1867. They occupy a three-story building, [illegible] x [illegible] feet, for the manufacture of sash and blinds. Also have a saw and grist mill of three run of stones, which is run in connection with the business. The saw mill cuts and finish five to 700,000 feet of lumber annually. Employ twenty hands, run twenty-eight machines, which consist of saws, planes, power and foot mortising machines, moulding machines, &c. The amount of stock consumed per year amounts to some [illegible] feet of common pine lumber, and [illegible] feet of Michigan and Canada pine. Do a business of about $[illegible] or $[illegible] per annum. The motive power for the saw and grist mill and sash and blind shop, is supplied by five [illegible] Kenney water-wheels, under [illegible] feet fall.

GOFFSTOWN CENTRE,

6 miles from Manchester. A station on the Manchester and North Weare Railroad, in the town of Goffstown.

GONIC,

8 miles from Dover and 20½ from Alton Bay, a station in the town of Rochester, on the Dover & Winnipiseogee Railroad.

Gonic Manufacturing Co. Capital $[illegible]. This company was incorporated 18[illegible], for the manufacture of plain, [illegible] and [illegible] flannels. Their buildings consisting of mill building, [illegible] x [illegible] feet, four-stories, with addition, [illegible] x [illegible] feet, four-stories, containing [illegible] sets, [illegible] looms, &c., are situated near Cocheco river, on which they have a fall of 1[illegible] feet. They are commencing to build another building, [illegible] x 1[illegible] feet, thus increasing their facilities for the manufacture of flannels. Employ [illegible] hands, and manufacture [illegible] yards of goods daily.

Their machinery is driven by water-power, with auxilliary engine of 60 horse-power, built by the Putnam Machine Co., of Fitchburg, Mass.

N. V. Waterhouse, agent at the mills.

Parker, Wilder & Co., No. 4 Winthrop Square, Boston, and 62 Leonard street, New York, selling agents.

GORHAM, 96 miles North of Concord, 91 from Portland and 200 from Montreal. A station and town on the Grand Trunk Railroad. It is a rough and unproductive township, lying on the Northerly base of the White Mountains. Several streams descend from the mountains through this town, into the Androscoggin. It was formerly called Shelburne Addition, but was incorporated by its present name June 18th, 1836. In 1869, there were in this town 238 ratable polls. Valuation of real estate, $250,780. The proportion on $1,000 State tax was $1.86. There are three schools with an average attendance of 130 scholars, 2 churches and 3 large hotels. There are 197 horses, valued at $14,142; 205 cows, oxen and neat cattle, valued at $8,222; 238 sheep, valued at $660. Value of lands, $151,832.

No. of churches, two, one Congregational and one Methodist; one library; three manufacturers of Lumber; one manufacturer of tin ware; one bedstead factory, nine stores; two doctors; one locomotive and car repair shop (G. T. R.) sixty-four swine, about 1000 population. Rate of taxation, three cents and three mills on the dollar.

CLEMENT GOODRICH & BENSON occupy a wooden building, 32 x 90 feet, and one 30 x 50 feet. Dry house, 24 x 24 feet. For the manufacture of Lumber. Commenced business in 1868. Employ 25 hands. Their machinery is driven by two Chase turbines and one centre vent water wheel. Also a portable steam engine, sixty horse-power, built by Staples & Co., of Boston. They turn out 3,000,000 feet of lumber per annum.

C. S. PEABODY is located at Larry's crossing, 1½ miles from Gorham station, where he occupies a wooden building, 90 x 30 feet, another 78 x 25 feet, with dry house, 18 x 24 feet, for the manufacture of Lumber. Commenced business in 1843. Employs 10 hands. Machinery is driven by one Blake, 4 center vent and two rose water wheels. He turns out 500,000 feet of lumber per year. Also has a tannery building, 30 x 64 feet, with L, 24 x 36 feet; another L, 28 x 34 feet; storehouse, 26 x 65 feet. Employs 6 hands. Tan 3500 sides, and do business amounting to $10,000. Consumes 300 cords of bark annually.

GRAFTON, 26 miles from White River Junction, and 43 from Concord, a village and town on the Northern Railroad of New Hampshire. The town is watered by branches of Smith's and Mascomy rivers. Heard's river, a small tributary to Smith's river, waters the south-east part. There are five ponds, the largest containing from 200 to 300 acres, is called Grafton pond. The surface of Grafton is very hilly, in some parts very mountainous, and the soil is so rocky as, in many places, to be unfit for cultivation. There are, however, some good tracts of land. The town was settled in May, 1772. Incorporated in 1778. In 1868 there were in this town 269 ratable polls. The valuation was $383,558. There were 167 horses and mules, valued at $9,995; 1,047 cows, oxen and neat cattle, valued at $33,139; 3,492 sheep, valued at $5,521. Value of lands, $188,441.

GRAFTON CENTRE, 25 miles from White River Junction and 44 from Concord, a station in the town of Grafton on the Northern New Hampshire Railroad.

GREAT FALLS, 6 miles from Junction, 20 miles from Union Village, is a village of 6,000 inhabitants, in the town of Somersworth. The town was separated from the town of Dover in 1729. Incorporated a town in 1754. It is bounded on the north by Rochester, east by the Salmon Falls river, which separates it from Berwick, south by Rollingsford, and west by Dover. The village has six churches, two Methodist, one Congregationalist, one Baptist, one Freewill Baptist, and one Catholic. There are two Banks and one Savings Bank. Number of voters in the town, 1,061. Rate of tax on $100, $1,88. There are eleven schools, one High, one grammar, and the balance primary. Two hotels, the Great Falls Hotel, and the Granite State Hotel. The village is situated on the Great Falls and Conway Railroad.

GREAT FALLS MANUFACTURING CO. Incorporated 1823. Capital $1,500,000. Occupy five brick mills for the manufacture of 24 to 43 inch sheetings and shirtings, flannels, drillings and print cloths; also one large brick mill used in the manufacture of seamless bags. Have 3,000 employees, and produce 15,000,000 yards of cloth, and 500,000 bags per annum, consuming 3,350,000 pounds of cotton, or 7,700 bales. Run 2,100 looms, and 85,000 spindles. Power furnished from 17 water wheels, etc. Minot, Hooper & Co., selling agents, Boston and New York. Samuel Hooper is president, and Daniel N. Spooner, treasurer of this company.

HUBBARD, CANNEY & CO., occupy a three story wooden building, 70 x 40 feet, located on Market street, and manufacture doors, sash and blinds. They commenced business in Aug. 1867, and have twenty employees, consuming annually about 300,000 feet of lumber, and doing business of $20,000. An engine of 30 horse-power, of the Corliss pattern, built by William A. Harris, of Providence, R. I., supplied with steam from a tubular boiler built by the Swamscot Machine Co., of South Newmarket, N. H., drives their machinery.

DAVIS, BLOOD & Co. commenced business in 1867, and have seven employees. They occupy a three story brick grist mill, 70 x 40 feet, and manufacture flour of all grades. They have four run of stones and grind about 100,000 bushels of corn, making about forty barrels of flour per day, and doing business of $22,000 per annum. Their machinery is driven by six Warren turbine water wheels, of 136 horse-power combined, the fall being 22 feet.

H. B. DAVIS & Co., manufacturers of bobbins and spools, commenced business in 1862, and have five employees. They occupy the upper floor of a three story brick building, 60 x 30 feet, and turn out about 4,000 bobbins per day. Their machinery is driven by a turbine water wheel of 35 horse-power, with a fall of 25 feet.

HORNE, CLARK & Co. occupy a three story brick building, 60 x 30 feet, and manufacture doors, sash and blinds. They commenced business in January, 1869, and have ten employees. A turbine water wheel, 35 horse-power, drives their machinery, the fall being 25 feet.

BRACKETT & Co. manufacturers of confectionery and cigars, commenced business in 1864, and employ thirteen persons. They occupy a two story wooden building 70 x 45 feet. Consume about one ton of sugar per week, doing business of $50,000 per annum.

SOMERWORTH MACHINE Co,. established business in

1850. They occupy three buildings [illegible] for the manufacture of [illegible]. Mill machinery and gas works castings. Employ [illegible] hands, and produce from three to seven tons castings per day. The machinery is driven by water-power assisted by a steam engine of [illegible] horse-power.

GREAT FALLS WOOLEN CO., D. H. [illegible], agent and treasurer. This company was established in [illegible], and at present are manufacturing [illegible]. They occupy a [illegible] building [illegible] feet, with [illegible]. They employ [illegible] hands, run [illegible] machinery, driven by water-power from the Salmon Falls river.

This company consumes from [illegible] to 1,000 pounds of clean wool daily, and produces from 1,000 to 1,200 yards manufactured goods.

D. K. [illegible] & Co., of New York, and [illegible] & Co., of Boston, are their selling agents.

GREENLAND. 51 miles from Boston and [illegible] from Portsmouth; a country station and town on the Eastern railroad, in Rockingham county. The soil is remarkably good. Incorporated a town in [illegible]. In 1868 there were in this town [illegible] ratable polls. Valuation $[illegible]. There were [illegible] horses and mules, [illegible] cows and oxen, and [illegible] sheep. Valuation of lands, $[illegible].

HAMPTON. 46 miles from Boston, and [illegible] from Portsmouth, a station and town on the Eastern Railroad. The soil of this town is well adapted to tillage and [illegible]. The town is pleasantly [illegible], affording [illegible] views of the ocean. Its [illegible] have long been the resort of invalids and parties of pleasure, and are nearly as attractive as the famous Nahant Beach near Boston. The Indian name of the town was Winnacunnet. [illegible] in [illegible] by emigrants from England. The first house was erected in [illegible] by Nicholas [illegible]. The town was incorporated in [illegible], and then included the towns of North Hampton, Hampton Falls, Kensington, and Seabrook. In 1868, there were [illegible] ratable polls in this town. Valuation $[illegible]. There were [illegible] horses and mules, [illegible] cows and oxen, and [illegible] sheep. Value of lands $[illegible].

HAMPTON FALLS. 43 miles from Boston and 13 from Portsmouth; a station and town on the Eastern railroad, in Rockingham county. The soil is generally good. This town was set off from Hampton and incorporated in 1712. In 1868 there were in this town [illegible] ratable polls. Valuation, $[illegible]. There were [illegible] horses and mules, [illegible] cows and oxen, and [illegible] sheep. Value of lands $[illegible].

HAVERHILL. 84 miles from Concord, [illegible] from Boston and [illegible] from Providence. A small village containing two churches, located in the town of Haverhill, Grafton county. The soil is [illegible]. Settled in [illegible]. Several of the settlers came from Newbury and Haverhill, Mass.; and from the last the town derived its name. Population in 1860, was [illegible]. Ratable polls [illegible]; valuation, $[illegible]. [illegible]

There were [illegible] horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep, valued at $[illegible]. Value of lands, $[illegible].

HAYE'S CROSSING. 17 miles from [illegible] Crossing and [illegible] miles from [illegible] Village, a flag station on the Portsmouth, Great Falls and Conway Railroad.

HENNIKER. 7 miles from Contoocook and [illegible] from Concord; a station and post town on the Contoocook River Railroad. The Contoocook river passes through the centre of the town. The soil of the hills is [illegible]. Settled in [illegible]. Incorporated 1768, when it received its present name from Gov. Wentworth, in honor of his friend Henniker, probably John Henniker, Esq., a merchant in London, and a member of the British Parliament at that time. In 1868 there were in the town [illegible] ratable polls. Valuation $[illegible]. There were [illegible] horses and mules valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep, valued at $[illegible]. Value of lands, $[illegible].

HILLSBORO' BRIDGE. 15 miles from Contoocook and [illegible] from Concord. A station at the terminus of the Contoocook River railroad, in the town of Hillsboro'. This town is well watered. Contoocook passes through the [illegible]. Hillsboro' river [illegible] from ponds in Washington, runs through the whole extent of the town [illegible], and forms a junction with the Contoocook on the south line of this town; the land is [illegible], but it affords some good farms. Settled in [illegible]; incorporated in 1772. In 1868 there were [illegible] ratable polls. Valuation, $[illegible].

There were [illegible] horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep, valued at $[illegible]. Value of lands, $[illegible].

THE CONTOOCOOK MILLS are owned by J. B. Smith. The mill buildings are [illegible] and [illegible] feet, and two stories. The products of these mills, which employ [illegible] hands and consume [illegible] pounds of scoured wool per year, are about [illegible] dozen of all-wool shirts and drawers. The machinery is driven by one of the best water-powers in the State, which has a fall of [illegible] feet, equal to [illegible] horse power. The selling agents of these goods are [illegible] & Co., [illegible] street, Boston.

HINSDALE. 19 miles from Keene, and [illegible] from South Vernon. A small village and station on the Ashuelot Railroad. The Ashuelot river runs through the centre of the village, furnishing ample water-power for [illegible]. The village is built on a [illegible] of land, with [illegible], and the river [illegible], gives the place a very pleasant and attractive appearance. The Railroad track is [illegible] the river bank. The village contains two churches.

The town is well watered with springs and rivulets of the purest water. The Connecticut washes its western border, and the Ashuelot runs through the centre. On the North line is Hinsdale or West River mountain, which [illegible] from the banks of the Connecticut, and [illegible] the north of this town. Its greatest elevation is at the West end. The [illegible] is [illegible] feet. Hinsdale was incorporated in 1753. Settled in [illegible], and was formerly a part of Northfield. In 1868 there were

578 ratable polls in this town, the valuation was $611,657. There were 169 horses and mules, valued at $17,235; 619 cows, oxen, &c., valued at $31,653. 442 sheep, valued at $1,808. Value of lands, $850,250.

HOLMAN & MERRIAM, manufacturers of improved turbine water wheels, circular mills, jack and press screws, &c. The business was established in 1855, by Mr. Holman, he succeeding J. C. Tolman, who carried on business here over ten years. The building is of wood, 60 x 40 feet, two stories. An eight-horse power turbine wheel is used, with the full number of machines used in the business.

NEWHALL & STEBBINS, manufacturers of Granite State Mowing Machines, Dovetailing, &c. This company commenced business twelve years ago, previous to which Mr. Newhall had carried on the general machinist business for several years. The main building is 75 x 30 feet, three stories, with L, 20 x 24, also three stories. There is a storehouse on the opposite side of the street, 20 x 30 feet, three stories. The average number of employees is 18, who will turn out during the year 1869, about 500 machines. An Anderson turbine wheel of ten-horse power is used.

GEORGE ROBERTSON, manufacturer of thick and thin manilla paper, in reams and rolls. Occupies a building, 44 x 60, with four L s, two stories. Employs 12 persons, runs three engines of 250 lbs. each, and one 5-inch cylinder machine. The works were established in 1849, by G. & J. Robertson. He uses ropes, sacking, &c., to the amount of 1800 lbs. per day. Uses one 3-feet Tyler and one 18 feet Anderson wheel, having an ample supply of water at all times from the Ashuelot and Connecticut rivers.

HOBSON'S MILL, a country station, on the Grand Trunk Railroad.

HOBSON'S MILL, located at Hobson's Mill Station, on the Grand Trunk Railroad, for the manufacture of Lumber, commenced business in 1865, employs 50 hands. Machinery is driven by a steam engine, 40 horse power, with 4 tubular boilers. Turn out 4,000,000 feet of lumber per year.

HOLLIS, 39 miles from Worcester, 7 from Nashua, a country station on the Worcester & Nashua Railroad, in the town of Nashua. The village is 4 miles from the station in the town of Hollis.

HOOKSETT, 9 miles from Manchester and 9 miles from Concord, a manufacturing village and town, on the Merrimack river and Concord Railroad. Hooksett, Merrimac County, was formed from parts of Chester, Goffstown and Dunbarton, and incorporated July 5th, 1822. Here are those beautiful Falls known as Hooksett Falls. The descent of water is about 16 feet perpendicular in 80 rods; a high rock divides the stream, and a smaller one lies between that and the western shore. The village of Hooksett has one church. In 1868, there was 219 ratable polls in the town. Valuation, $567,424; the proportion on a State tax was $5,81 on a $1,000. There were 169 horses and mules, valued at $10,701; 442 cows, oxen and neat cattle, valued at $14,159; 588 sheep, valued $1,773. Value of lands $275,864. This place is noted for having the best and largest clay banks in New England, and no brick can be found superior in quality, color or durability to the "Hooksett Brick."

NATT & W. F. HEAD, manufacturers and dealers in Brick and Lumber, employ about 40 men, and make 4,000,000 bricks annually. They use a 15-horse power engine (made by the Manchester Locomotive Works,) to grind their clay and make or strike their brick by hand and in water. They also have a No. 1 water power Saw Mill, from which they manufacture annually some 500,000 feet of lumber, mostly into dimension stuff, as they receive orders. They own a large tract of land and do, in connection with their other business, a large amount of farming. They have been in business 16 years together.

ISLAND POND, 149 miles from Portland, on the Grand Trunk Railroad, the only business is one saw mill. There are two hotels, two churches, and one school, with 180 scholars.

KEENE, 42 miles from Fitchburg, 23 from South Vernon and 205 from New York, situated on the Ashuelot river, and at the junction of the Ashuelot railroad with the Cheshire railroad. A very enterprising village of about 5,500 inhabitants. Keene has been visited for the past years with numerous fires, which destroyed many of her manufacturing establishments, which have been rebuilt in a substantial manner in place of the old buildings which were destroyed. The soil of the town of Keene is generally good. Ashuelot river has its source in a pond in the town of Washington and discharges itself into the Connecticut, at Hinsdale, twenty miles distant from this place. Keene has been called one of the prettiest villages in New England. It is particularly entitled to notice for the extent, width and uniform level of its streets. The main street extending one mile in a straight line, is almost a perfect level, and is well ornamented with trees. Keene was settled about the year 1734, and was originally called Upper Ashuelot. Incorporated as Keene, April 11th, 1753, deriving its name from Sir Benjamin Keene.

In 1868 there were in this town, 1,383 ratable polls. Valuation $6,169,991. Number of horses 529, valued at $44,990. Number of cows, oxen and neat stock, 1,061; valued at $50,656. Number of sheep, 2,517; valued at $5,975. Value of lands, $1,681,240.

The village of Keene has six churches, a town hall, three national and one savings bank, and two newspapers. The population of this place has increased rapidly for the past four years. In 1868 there were seventy-nine dwelling-houses erected.

JOHN HUMPHREY & CO., manufacturers of circular sawmills, and all kinds of wood-working machinery, also steam engines, turbine wheels, machinists tools, shafting, gearing and mill work. Mr. Humphrey commenced business in 1856, and from 1859 until May, 1861, he carried on the business at White River Junction. On the 29th of May, 1861, a fire destroyed his machine shop, but the 1st of June saw him again commencing business in Keene, where he has since remained, carrying on the busines successfully.

The number of employees at the present time is about 30. The buildings are three in number. The first, built of brick, 100x50 feet; the second, of wood, 50x30 feet, each one-story; the third, pattern shop, 30x24 feet, two stories. Their machines consist of 10-engine lathes, of various capacities, turning from 14 inches to 9 feet diameter; 4 hand lathes, 3 upright drill presses, iron and wood planes, bolt cutters, trip hammers, &c. They use steam as a motive power. Annually use about 80 tons of castings, beside other stock, in the production of the various kinds of machinery, such as water wheels, shafting and mill work of various kinds, an improved machine for sawing marble, and a variety of wood-working machines, as stationary and

revolving tables, planing, pail, chairs, shoe pegs, clothes pins, and other kinds of wood working machines, with several improvements of their own invention. In fact a list of their productions includes a great variety of articles, from a double steel lined burglar-proof safe for banks to a simple caliper for the lumberman to measure his logs. They have generally essayed to make everything their customer requires, be it a machine of well-known construction and uses or one required for a new purpose, requiring invention and adaptation to the object which it is designed to accomplish.

This company make a speciality of inventing and designing machinery, as well as constructing it, and their success in each of these branches has made their work deservedly popular wherever it is known and used. They have received patronage from a majority of the States of the Union, the Canadas and the British Provinces, also from Germany and Australia, whither they have sent quite a number of their wood-working machines.

M. H. & Co. give special attention to Hydraulic Engineering, from the surveying of millsites and making plans for the improvement of water powers, to the furnishing the same with appropriate motors, embracing a variety of styles, as the Leonard, Jonval and Central discharge Turbines, adapted to the various places and purposes for which they may be required. They are prepared to furnish plans for mills and various kinds of manufactories, for which they construct the machinery. Mr. Humphrey's skill and experience has given him the confidence of his patrons and a high reputation as a mechanical engineer. Since the commencement, the company have adhered strictly to the plan of having their work done in a thorough but economical manner, so as best to subserve the interests of their customers, believing their own interests to be identical with that of their patrons, and that a continuance and increase of business depend upon giving to each purchaser of their goods, an article fully worth its price; and success in business has fully proved this to be their proper course.

(See advertisements on pages 143, 213 and 300.)

J. & F. French, manufacturers of carriages and sleighs of every description. The business was established in 184[illegible] by W. & J. French, and in 18[illegible] changed to J. & F. French. The main building built of brick, is 50 x 25 feet, three stories. There are also three wooden buildings, 45 x 25 feet, two stories, and blacksmiths' shop 40 square feet, one story. Number of employees about 25, turning out 250 carriages and sleighs each year.

Cheshire Steam Mill, M. Fairbanks, proprietor. The establishment is situated on Davis street, extending from Railway street to the line of the Ashuelot railroad, and consists of main building 125 x 40 feet, 3 stories, occupied by J. Sherman, manufacturer of sash, doors and blinds, by the proprietor for saw and grist mill, and by Whitcomb & Crane, manufacturers of brush handles; the second story by E. Murdock, for the manufacture of wooden pails, and the third story by H. Kendall, box manufacturer; [illegible] building situated near the railroad is 50 x 30 feet, three stories. E. Kendall also uses this building.

Machine Shop on Railway street, occupied by J. Humphrey & Co., 100 x 30 feet, one story; a building below, 48 x 40 feet, one story, for the manufacture of [illegible], planers, &c., by Daniel Bates, a building in the rear occupied by H. Harvey, manufacturer of [illegible], &c., 16 x 20, one story, and dry house [illegible] x 15, one and a half stories. These comprises the buildings that belong to the steam mill. The power is furnished from a one hundred and fifty horse-power engine of the Putnam Machine Co.'s works, with tubular boilers, made by Chadbourk & Sons, of Boston.

Our agent obtained the information of these works January 15, 1862, and on that night about the hour of eleven, the town was thrown into excitement by the alarm of fire! fire!! which was caused by the burning of these works with the exception of the machine shop and one or two other buildings. The main building being a total loss with the fixtures and machinery and stock not paid in process of manufacture.

Faulkner & Colony. In 1815, Francis Faulkner and Josiah Colony commenced business on what is now West street, building wool, cloth dressing, and running a saw and grist mill; they commenced business in a small way, doing at that time quite a business. In 1825 they had the misfortune of being burned down, but immediately rebuilt with brick. In 1830 they started the manufacturing of woolen flannels, running one set of machinery. In 1838 the upper [illegible] done, [illegible] them out actually, but nothing daunted, they commenced preparations for a new mill, and before 1850 they had completed a brick mill, 125x42, four stories and attic, with dye house attached, 42x30, one story, and drying house containing one of Clevelands patent 100-inch cloth dryers; picker house, 28x40, two stories, second story used for pickers, first for drying wool; these buildings being of brick. They have a building in the rear 32x16, two stories, used for storing wool and dye stuff and wool in second story or attic; storehouse built of brick, on the Cheshire railroad, 72x36, one story, with capacity for storing 2,000 sacks of wool, this building being fireproof; cloth drying building, 24x175, two stories. The office building is built of brick, situated on the opposite side of the street, 44x25, two stories, sorting room being in the second story. Their grist and saw mill is situated below their woolen factory, and is now rented. In 1842, Francis Faulkner died and the business was carried on by Mr. Colony, the family of the deceased still having an interest in the firm, and in 1846, Charles S. Faulkner, son of the deceased, became the junior member of the firm, and the business was carried on by them until 1856, when Mr. Colony retired in favor of his two sons, George D. and Horatio, under the same name as when first started in 1815. They run 6 sets of woolen cards, and 20 looms, employing 67 hands, using about 300,000 pounds of wool and produce 700,000 yards per annum. They derive their motive power from a 19-inch turbine wheel made by Kilburn & Lincoln, of Fall River; capacity, 75 horse power. Campbell, Whittier & Co., of Boston, furnished them with a tubular boiler, which is used for heating and boiling kettles.

Cook, Baker & Co., commenced business on Mechanic street, in 1865, for the manufacture of carriages and sleighs. The business was established by Edwards & Cook, in 1861. They occupy a room in a brick building owned by Nims, Crossfield & Co., 50 x 60 on first floor, and in the ell part 30 x 62. Their trimming, painting and finishing is done in a building opposite. In addition to the manufacturing of carriages and sleighs, they make shafts, rims; also fells and [illegible], rails and travels.

Their steam house, where the shafts, rims, &c., are steamed and bent, after being sawed, is situated in rear of the, a building 80x18, two stories. They use the exhaust steam from the boilers for this purpose.

They employ fifteen hands, running one jig saw, one rim bender, one tenoning machine, cutting-off and splitting saws, planing machine, a felloe reamer with capacity for reaming [illegible] per hour. In the finishing shop, they have four forges, the fires kept in blast by power from the engine; a brick [illegible], with a large iron table for putting on tires, a trip-hammer and a hub reamer.

The firm intend to turn out 100 sleighs per annum and 200 carriages per year.

Nims, Crossfield & Co. commenced business in 1866, as successors of Nims & Crossfield, who commenced business in

1863, for the manufacture of doors and blinds. The business was first established in 1850 by Lanmon Nims, the senior partner, who continued until 1853, when he took Mr. Daniel Buss into partnership with him; the name of the firm then was Nims & Buss, and in 1855 Mr. Woodard was admitted. Nims, Buss & Co. then being the name of the firm.

They continued until 1859, when Mr. Nims retired from the firm, and Buss & Woodard continued until 1863, when misfortune overtook them and the property was sold to Messrs. Osborne & Hall, and in three months from that time they had leased the property to Nims & Crossfield, who continued until 1868, when H. C. Scott was admitted into the firm under the name of Nims, Crossfield & Co.

Their manufactory is situated on Mechanic street, in a two story brick building, 50 x 214, with ell 50 x 80 one story. Engine and boiler house, 30 x 50, containing one of Corliss Steam Engine Co.'s 80-horse power boilers, which furnishes the power for this building, and also to the chair manufactory opposite. The buildings are heated with steam from two tubular boilers, which also furnished steam for engine. The boilers were made by R. W. Pratt & Co., of Boston. The office building is 24 x 35, one story, of brick. They employ fifty hands. Their machines consist of three tenoning, three power morticing, two blind styles boring three foot morticing, two staple, three moulding, three sash sticking, one matching, and one sand-papering machine; also, twelve circular saws and taple, three boring lathes and three planers. They turn out annually 25,000 doors, 36,000 windows, and 18,000 blinds. Employ a glazier constantly during the year.

LACONIA, 27 miles from Concord, 99 from Boston; a manufacturing village, the largest on the route from Concord to Littleton. It is situated on both sides of the Lake stream which separates the towns of Laconia and Gilford. The village has one National and three Savings banks and two Hotels, and a population of about thirty-five hundred. In 1868, there were 513 ratable polls in the town of Laconia, $831,298 worth of real estate. The proportion on State tax of $1,000, was $5.58. There were 146 horses and mules, valued at $8,351; 491 cows, oxen and neat cattle, valued at $10,402; 386 sheep, valued at $607. Value of land, $342,559.

The Belknap Mills were incorporated in 1860; capital, $100,000; K. C. Gleason, President; R. M. Bailey, Treasurer. They run two mills, 40 x 80, four stories, brick; 160 x 36, three stories, wood, respectively, which contain eleven sets of woolen machinery and three thousand spindles, employ two hundred and fifty persons, consume three hundred thousand pounds of cotton and six hundred thousand pounds of wool yearly. Four Union wheels of one hundred horse power, and a sixty horse power engine, supply the power; the fall there is seven feet. They produce fifteen hundred thousand yards of plain and fancy flannels, scarfs, cottonades, repellants and fancy cassimeres, yearly. They also manufacture S. Thomas' patent Loom. R. M. Bailey & Co., 184 Devonshire Street, Boston, and 90 Franklin Street, New York, selling agents. This Company also have a mill at Lake Village, 1½ miles distant.

The Ranlet Manufacturing Co. was incorporated, 1861, capital, $50,000. James Ranlet, President, John C. Moulton, Treasurer and Agent. They occupy a main building used for manufacturing purposes, 300x40, one and two-stories; a blacksmith shop and foundry, 60x40 one-story each; saw-mill, 40x50. They employ 100 persons, produce 300 freight and 12 passenger cars yearly, doing a business of $300,000. Two engines and one wheel, with over 100 horse-power, supplies the power. The fall is ten feet.

NIMS, CROSSFIELD & CO.,

MANUFACTURERS OF

DOORS, BLINDS AND SASH,

Mechanic Street, first above Central, KEENE, N. H.,

Keep constantly on hand

Doors, Sash and Blinds, Glazed Windows and Window Frames of all common sizes.

Also, get out to order, and keep constantly on hand, all kinds of

Mouldings for Building Purposes, Clapboards, Shingles,

—AND—

PINE LUMBER OF ALL KINDS.

LANMON NIMS, G. B. CROSSFIELD, K. C. SCOTT.

Smith & Richardson employ nine men, sawing 100,000,000 feet of lumber annually, using 25-horse power.

Pitman & Tilton employ 30 persons, manufacturing 90 dozen pairs of hose daily. The pay roll amounts to $600 monthly.

E. B. Beamon makes 2,400 paper boxes every week. A ton of paper board makes about 1500 boxes, but to make these requires as many sheets of paper as of board. He uses 12 reams of glazed and plain paper per month.

Granite Hosiery Mills, J. W. Busiel, Proprietor. This establishment comprises two mills, 50x40, three stories, basement and attic, brick, and 36x40, 2 stories and attic, wood, for the manufacture of ladies' and gents' hosiery, plain and ribbed. He commenced here in 1847, at which time he made woolen yarn. In 1857, he commenced the manufacture of hosiery. The machinery consists of 5 sets and 50 knitting machines. The production is 4,200 dozen pairs per month. A 4 feet Howard and 6 feet Cooke wheel supplies the power; the fall is 7 feet.

Tilton & Moulton occupy one mill, 65x58, five stories, for the manufacture of hosiery. Run 3 sets of woolen machinery and 30 knitting machines. Employ 60 persons and produce 140 dozen pairs per day, known as the Laconia Mills.

The Guilford Hosiery Co. Mills. Incorporated 1864. Capital $50,000. Benjamin E. Thurston, President; John C. Moulton, Treasurer. They occupy mills 46x39, five stories, and 48x20, three stories, run 6 sets of machinery and 8 sets of plain knitting looms and 12 ribbed machines. Employ 60 persons and produce 200 dozen pairs of ladies' and gents' hose daily, consuming 500 pounds of wool and 1,500 of cotton weekly. A 30-horse power Baldwin wheel supplies the power, the fall being 13 feet. Monthly pay roll, $2,000.

Lewis F. Busiel occupies one mill for the manufacture of hosiery; commencing in 1860. He runs two sets of woolen machinery, 26 knitting machines; employs 50 persons; consumes 200 pounds of wool and cotton daily, producing 120 dozen pairs. The fall is 8 feet. Office 34 Franklin Street, Boston.

S. T. Thomas occupies a mill 100 x 32, 4 stories, wood, for the manufacture of cotton hosiery. He runs 1000 spindles, 8 knitting frames, with 54 heads; consumes 500 pounds of cotton, and produces 200 dozen pair hose daily. The fall here is 8 feet. Employs 60 persons. Monthly pay roll, $1000.

THE SANDY NECK CO., incorporated 1865. W. S. Thomas, Treasurer. They occupy one building 40 x 20, 3 stories, for the manufacture of knitted needles, spring and latch needles. Employ 40 persons, and produce 18 to gross spring needles, and 2000 latch needles, daily. The fall is 8 feet.

G. COOK occupies a building 34 x 70, 2 stories, wood, for the manufacture of sash, doors, &c., commenced here some years ago. He employs 12 persons, uses 175,000 feet of lumber, and does a business of $2,000 yearly.

S. K. BALLOWS commenced the manufacture of axe-helves in 1867. The business is to be enlarged and reorganized, and he is not in a situation to give any reliable information.

LAKE VILLAGE, 29 miles from Concord, 100 from Boston, 114½ from Providence. Quite an interesting village, containing one National and three Savings Banks, 4 churches and 2500 inhabitants, on the Boston, Concord and Lebanon Railroad.

SAMUEL FALES MILLER, Cooper; S. DOW, Agent. Has 8 set of wooden machinery and employ 150 persons. The mill is carried on by the Belknap Mills Co., Lawrence.

LEBANON, 5 miles from White River Junction and 69 from Concord. A village and town on the Northern New Hampshire Railroad. Besides the Connecticut river on its Western border, this town is watered by Mascoma river, running from East to West, through its centre. The soil is alluvial. This town was granted in 1761, and was the first town settled on the Connecticut river North of Charlestown. In 1860, there were in this town 772 taxable polls, the valuation was $1,458,575. There were 169 horses and mules valued at $16,215; 360 cows, oxen and neat cattle valued at $13,758; 11,341 sheep valued at $36,227; value of lands, $885,245.

The village has a population of about 1,000, four churches and one bank.

LEBANON STATE CO., chartered June, 1866. Occupy a mill, built in 1868, 64x141 feet, three stories. Employ 20 hands. They manufacture flouring, flooring, ground slate, sacks, water boxes, marbleized table and stand tops, marbles, shelving, &c. They have a never failing supply of water, and run their machinery by 100 horse power wheels.

I. STEARNS & CO. occupy a building, 40x70 feet, with wing, 30x40 feet, for the manufacture of marble mantle and hand rakes. Employ 10 men, turning out ten dozen rakes and 4 dozen mantle dogs. Doing a business of $12,000 per year. The motive power is furnished from a 12-horse power water wheel.

LISBON, 103 miles from Concord, 175 from Boston, 218½ from Providence, on the Boston, Concord and Lebanon Railroad, a small village containing one church in the town of Lisbon. This town is watered by Ammonoosuck river, running through the whole extent of the town, and by several small streams. The soil consists of three divisions, the meadow lands on the Ammonoosuck, which are generally very productive; the plain land or a light sandy soil, and the uplands or a strong, deep soil, which affords many good farms. Blueberry mountain is the principal elevation. Iron and limestone are found here.

IN 1860, there were 327 taxable polls; valuation $668,351; proportion of $1,000 State tax, $4.481; there were 446 horses and mules, valued at $19,010; 1,504 cows, oxen and neat cattle, valued at $46,091; 4,300 sheep, valued at $6,845. Value of land $444,884.

PARKER & YOUNG, commenced business in 1851, for the manufacture of patent starch. Occupy a building 66 x 100 feet, employing four hands and producing on an average two tons of starch per day. The business amounting to $80,000 per year. The machinery is driven by a twenty horse power engine.

LITTLEFIELD'S, about 14 miles from Portsmouth and 27 from Manchester, a flag station on the Concord and Portsmouth Railroad.

LITTLE'S, 4 miles from Nashua, 32 from Boston and 6 from Lowell, a flag station on the Nashua and Lowell Railroad, on the Merrimac river.

LITTLETON, 113 miles from Concord, 186 from Boston, 278½ from Providence, on the Boston, Concord & Lebanon Railroad, contains three churches and 1 savings bank, located in the town of Littleton. This town is located on the Connecticut river, which passes down two rapids called Fifteen Mile Falls, extending the whole length of Littleton. The stream runs in tortuous waters for miles together. The land on the banks of the Ammonoosuck is rich. Near this river there is a mineral spring, the water of which is said to be similar to the Congress spring, at Saratoga. In 1865, there were 633 polls in this town; the valuation was $837,502 and the State tax on $1000 was $5.61. There were 429 horses and mules, valued at $33,414; 1471 cows, oxen and neat cattle, valued at $42,919; 3372 sheep valued at $8,236. Value of land, $470,292.

LONDONDERRY, 20 miles from Lawrence, and 6 from Manchester, a station and town on the Manchester and Lawrence Railroad. This town was settled in 1719, by a colony of Presbyterians from the vicinity of the city of Londonderry, in the north of Ireland, to which place their ancestors had emigrated about a century before, from Scotland. In 1860 there were in this town 213 taxable polls and a valuation of $849,297. There were 288 horses and mules, valued at $14,081; 1,092 cows, oxen and neat cattle valued at $30,366; 400 sheep, valued at $920. Value of lands, $679,031. Incorporated June 21, 1827; number of acres of land, 22,016; 9 churches, 10 schools, with 407 children attending; number of looms, 350.

MADBURY, 65 miles from Boston, 41 miles from Portland, 18½ miles from Dover, N. H., a station and town of 450 inhabitants, on the Boston & Maine Railroad, has 1,000 rivers and 4 district schools. The inhabitants are chiefly engaged in agricultural pursuits. The soil of the town is generally good. Bellamy Bank river is the only stream of any magnitude, and Bellamy pond the only considerable body of water in the town. Dover and Madbury, and is 140 x 80 rods. This town was formerly a part of Dover, the two set off and incorporated May 16, 1755. There were in this town in 1860, 169 taxable polls. Valuation $941,772. There were 98 horses and mules, valued at $6,844; 276 cows, oxen and neat cattle, valued at $17,878; 372 sheep, valued at $995. Value of lands, $442,610.

MANCHESTER, 18 miles from Concord, 17 from Nashua, 57 from Boston and 41 from Portsmouth; situated on the left bank of the Merrimac river. The Concord, Portsmouth, Nashua and Lowell, Lawrence and North Weare railroads centre here. The city is located on an elevated plain ninety feet above the river, and contains several fine public buildings, among which is the town hall, the athenæum, public school buildings, &c. The growth of Manchester is due to the development of the immense water power here. The river has a descent of 54 feet in one mile. By erecting a dam and constructing a canal, power enough has been obtained to run several 100,000 spindles. The city is lighted with gas and is the largest in the State.

Manchester is to have a building expressly for its city library. The Amoskeag company has given a lot, and a plan has been adopted for a building that will cost $25,000. Capitalists interested in the manufactures of the town will contribute half of this; the city council appropriated $5,000 and will doubtless appropriate the balance. The library contains 13,000 volumes.

In 1868 there were 4,582 ratable polls in this city; the valuation was $12,560,436; number of horses and mules 953, valued at $71,518; 735 cows, oxen and neat cattle, valued at $28,282; 721 sheep valued at $4,402; value of lands, $4,681,768.

THE STARK MILLS, Canal street, was incorporated 1838; commenced operations 1839. Capital, $1,250,000. Number of shares 1,250; par value, $1,000. Israel Whitney, President. William Amory, Treasurer. Phineas Adams, Agent. D. C. Gould, Jr., Paymaster. This company run two large mills, containing 40,000 spindles, 1,300 looms, employ 300 males and 900 females. Consume 200 bales of cotton weekly, and produce 6,000,000 pounds of goods yearly, including flax and cotton; manufacturing sheetings, drillings, cotton duck, seamless bags and linen goods. Gardner Brewer & Co., agents, Boston, New York and Philadelphia.

IN 1866 HIRAM FORSAITH commenced the manufacture of circular saw mills, excelsior machines, shafting, &c. He occupies two floors 50 x 30 each, on Mechanics Row. Employs 10 persons, and does a business of $15,000 yearly. He also manufactures knitting machine needles.

B. F. JENKINS & Co., occupy one floor, 50 x 30, for the manufacture of power loom pickers, commencing on Mechanics Row in July, 1868. They employ three persons, and do a business of $12,000 yearly.

P. C. CHENEY & Co. occupy four buildings at Goff's Town Centre, for the manufacture of printing, manilla, shoe and wrapping paper. They employ forty persons. Run six engines, and one cylinder machine. Office, Elm street, of this city.

H. F. STRAW occupies one building 100 x 40, two stories, built of brick in 1868, for the manufacture of hosiery. The business was established in 1866. He employs 60 persons, runs 27 knitting machines, produces 150 dozen pairs daily, and does a business amounting to $60,000 yearly. A 20-horse power engine supplies the power.

VARNEY & COREY occupy one room in a large brick building near the depot, for the manufactory of needles for knitting machines; commencing here in 1868. They employ 10 persons, and produce 2000 per day, doing a business of $10,000 per year.

KIMBALL BROTHERS commenced the manufacture of calf, sheep and lamb Roll Skins, at 423 Elm Street, in 1866. They occupy a shop 100 x 30 feet, 2 stories, finish from 150 to 200 dozen of sheep and lamb skins per week, and about 6000 calf skins per year. The annual production amounting to $40,000. Amount of business done, $60,000. The junior partner has been at the head of the same branch of business for the past 12 years, and is unsurpassed as a roll skin finisher. The reputation of this house is known throughout New England and Middle States, for producing reliable and well finished work.

GRANITE FILE WORKS, Benjamin S. Stokes, proprietor; occupies 2 floors, 50 x 30 each, on Mechanics' row; commencing here in 1851. He employs 15 persons, and produces 16 dozen per day of rasps and files, all made by hand. He took medals at the fairs held at Lowell, Boston, Concord and Manchester, for fine work.

THE MANCHESTER PRINT WORKS was incorporated 1837. Capital, $1,800,000. Doctor Oliver Dean, President; Geo. R. Chapman, 82 Milk Street, Boston, Treasurer; Waterman Smith, Agent; J. S. Shannon and Andrew N. Baker, Paymasters. This company have 3 large mills and Print Works. They run 105,000 spindles, 2000 looms, 31 set of machinery for cassimeres and satinets, 65 set for delaines and other woolens, and 20 sets of combers. Employ 3,200 persons, consume 100 bales of cotton per week, and 3,000,000 pounds of wool yearly, producing 20,000,000 yards of 28 to 35 inch; 64 square print cloths, 26 to 40 inch; 46 to 80 delaines and fancy goods, 28 to 32 inch cassimeres, cashmarets and satinets. Using 3000 horse power. They run 600 looms on fancy woolens, 400 on delaines, 200 on print cloths, and the rest on figured goods. The Print Works are among the largest in the country, running 16 printing machines, and producing a class of work that is not surpassed.

JAMES BALDWIN & Co. occupy two floors, 150x30, on Mechanic's Row, for the manufacture of bobbins, spools, shuttles and shoe pegs. Employ 31 persons and do a business of $40,000 yearly, making 1200 dozen pairs of ladies hose per week.

AMOSKEAG MANUFACTURING Co., capital, $300,000. Was incorporated in 1831. Dr. Oliver Dean, President. Wm. Amory, 60 State street, Boston, Mass., Treasurer. E. A. Straw, Agent. C. L. Richardson, Paymaster. This company have 6 mills, run 105,000 spindles, 3,000 looms, employ 4,000 persons, consume 25,000 bales of cotton yearly, producing 600,000 yards of sheetings, drills, &c., and a large variety of colored and fancy goods. They occupy two powers, one 20, the other 32 feet.

Gardner, Brewer & Co., Agents, Boston, New York and Philadelphia.

SILVER & FAIRBANKS commenced the manufacture of builders and miscellaneous hardware in 1868. They occupy one floor. Employ 15 persons. They are comparatively a new firm and are building up a rapidly increasing business.

GREGG & DODGE occupy one floor, 50x30, for the manufacture of valves, cocks, heaters, brass and iron fittings, commencing on Mechanic's Row in 1865. Employ 8 persons and do a business of $30,000 annually.

THE LANGDON MANUFACTURING Co. was incorporated 1857, capital, $500,000. G. Brewer, of Boston, President, Wm. Amory, jr., Treasurer, 60 State street, Boston. Wm. L. Killey, Agent.

This company occupy a mill, 220x50, five stories, with picker-house attached. A new mill was built in 1868-9, near the old one, 284x67, four stories, with picker-house attached, all brick. This company run a little short of 31,000 spindles, 624 looms, consume 55 bales of cotton weekly, produce 80,000 yards per week of 36, 40, 44 and 48-inch sheetings, shirtings and silesias, 72x80 and 88x100. They employ 500 persons, run 2 Boyden turbine wheels, with a capacity of 500-horse power, the fall being 20 feet.

B. H. PIPER, occupies second floor, 50 x 30 feet, on Mechanic's Row, for the manufacture of spokes and han-

KIMBALL BROTHERS,

MANUFACTURERS OF

CALF, SHEEP AND LAMB ROLL SKINS,

RUSSET LININGS, &C.,

MANCHESTER, N. H.

[illegible] He employs five persons and produces [illegible] spokes daily, doing a business of [illegible] annually.

William [illegible] occupies one building [illegible] for the manufacture of [illegible]. The works are located at Amoskeag Falls [illegible]. Employs [illegible] persons [illegible]. J. D. Dean, superintendent. Office of the proprietor, [illegible] Canal Street, Boston, Mass.

[illegible] Paper Mill, S. D. Warren, proprietor, is located on Canal street [illegible]. [illegible] Mr. W. commenced here in February, 1868, as successor to [illegible]. B. F. Martin established the business [illegible] years ago. Employs [illegible] persons [illegible]. He produces one and a half tons of book and news paper daily; a [illegible] horse-power Boyden wheel supplies the power; [illegible]. Mr. W. also has mills at Cumberland Mills and Gardiner, Me. Office in Boston, 21 Milk street.

S. C. Richardson & Co. commenced the manufacture of women's shoes at [illegible] Manchester street, in 1868. They employ eight persons and produce 120 pairs of shoes per week. Occupy a room 48 x 24.

John W. Whittier, [illegible] occupies one room, manufacturing [illegible]. Employs two persons; commenced business about 1847.

E. B. Varney occupies buildings [illegible], both two stories, on [illegible] Manchester street, for the manufacture of brass castings and ornamental sheet brass and copper work for locomotives and steam fire engines. Commenced business in 1857. Employs 24 persons and produces one-half ton of castings daily, doing a business of [illegible] per annum. A [illegible]-horse engine supplies the power.

The Manchester Locomotive Works [illegible] known throughout the Union, and the locomotives made here are used on many railroads. The company was incorporated in 1854. Capital $[illegible]. John A. Burnham, President; Wm. G. Means, Treasurer; A. Blood, Agent. The building used for manufacturing purposes, [illegible] [illegible] one story. A foundry and machine shop are located [illegible] one-half mile from the main establishment, [illegible] attached. They use [illegible] tons of iron per month [illegible]. The production is [illegible] per week. Employing [illegible] persons. [illegible] locomotives had been made up to January 1st, 1869. The business amounts to $[illegible] per annum.

A. Henry Lowell & Co. occupy three buildings for the manufacture of iron castings; commenced here January 1st, 1869. They employ [illegible] persons and produce [illegible] pounds of castings daily.

Tucker & Co. occupy a tannery [illegible] x 47, five stories, one mile from the City Hall, on the Nashua road, for the manufacture of [illegible]; commencing in 1866. They employ [illegible] persons, and produce [illegible] per week. A [illegible] horse-power engine supplies the power. Office, 110 Elm street.

E. Yeaton & Co. commenced the manufacture of [illegible] several years ago; occupy two rooms; employ thirty persons and do a business of $12,000 yearly.

VARNEY AND COREY,

LATCH NEEDLE

MANUFACTURERS,

Manchester, N. H.

With superior facilities and professional workmen, we are prepared to compete with any persons in our line.

Orders solicited and satisfaction guaranteed.

S. C. FORSAITH & CO.,

MANUFACTURERS OF

CIRCULAR SAW MILLS

WITH PATENT LEVER SETS,

Patent Newspaper Folding Machines;

ALL KINDS OF

Wood-Working Machines,

SHAFTING, MILL GEARING, &c.

Shop, East of Freight Depot, Manchester, N. H.

B. H. Chase, occupies one room for the manufacture of belts, on Mechanics row, commencing here in 1859; employs one man and does a business of $20,000 yearly.

J. A. V. Smith, occupies one floor 40 x 80, on Mechanics row, for the manufacture of fliers, commencing here in 1855. He employs 15 persons, and produces 8,000 fliers annually, and does a business of $30,000.

W. F. Roby, Mechanics row, occupies two floors 50 x 30 for the manufacture of brushes, commencing here in 1866. He employs fourteen persons and does a business of $12,000.

A. P. Olzendam, occupies a brick mill on Mechanics row 100 x 34, 3 stories for the manufacture of hosiery, commencing here in 1865. He employs 55 persons; consumes 3,000 pounds of wool per week; uses 75 knitting machines, runs three sets of woolen machinery. Produces 14,400 pair per weeks. Barry & Brother, 69 Federal street, Boston, Mass., agents.

John Brugger occupies a mill on Mechanics' row, for the manufacture of woolen stockings. Employs 60 males and 59 females, and runs 6 sets of machinery. A large number are employed in the surrounding country.

Bisco and Denny occupy one room in Mechanics' row, for the manufacture of cotton and woolen machine card clothing; commencing here in 1857. Employ one person, run 21 machines, and produce 64 square feet per day.

The Amoskeag Axe Co., Canal street, was incorporated 1853. Capital $100,000. Moody Currier, President and Treasurer; H. C. Reynolds, Agent. They occupy a main building 50x60, 3 stories, with L 160x50, 1 story; also, an office and storehouse. They employ 50 persons, consume half a ton of iron and 300 pounds of steel daily; 4500 tons of coal yearly; manufacturing edge tools,—producing 500 per day. A 90-horse power Leffel turbine wheel supplies the power. Fall, 20 feet; amount of business done, $125,000.

John Cleworth commenced the manufacture of reeds for manufacturers' use, in 1844. He occupies 2 floors 50 x 30 each; employs 4 persons; produces 300 reeds per week, and does a business amounting to $15,000 yearly. The long experience which he has had (over 30 years,) makes his services valuable, and his reputation for first class work is well known as reliable.

William W. Hubbard, commenced the manufacture of stair rails in 1861. He employs five persons and is located on Mechanics row.

A. W. Sanborn, occupies a brick building 100 x 35 with L 60 x 30; three stories above basement on Elm, corner of Bridge streets, for the manufacture of carriages, commencing here in 1850. He employs 35 persons, produces 250 carriages yearly, and does a business amounting to $60,000.

Thomas R. Hubbard, occupies two floors 150 x 35, for the manufacture of sash, doors, blinds, and boxes, commencing here in 1853. He employs 35 persons and does a business amounting to $60,000 annually. Located on Mechanics row.

S. C. Forsaith, commenced the manufacture of circular saw mills, patent newspaper folding machines, shafting, wood working machinery, &c., in 1860; removing to his new brick building in the fall of 1868. S. C. Forsaith & Co., succeeding in Feb. 1869. The building is 114 x 40, three stories, with engine and boiler-house attached, 30 x 34, one story. They occupy 1½ floors, leasing the others to different parties. Employ 30 persons; use five tons of castings per month and do a business of $35,000 yearly. A 80 horse-power G. W. Davis & Co's. engine, supplies the power and for other shops in the immediate vicinity. This manufac-

JOHN CLEWORTH,

MANUFACTURER OF

LOOM REEDS,

ALSO DEALER IN

Wire Heddles and Belt Hooks,

MECHANICS MILLS,

Manchester, N. H.

[illegible] and leaving Manchester.

HAINES & WALLACE [illegible] in 1861. They occupy works on Main street. Employ 25 persons; produce 750 barrels per month; and do a business of $80,000 yearly. [illegible] 1,000,000 feet of lumber per month [illegible] in Lynn, &c. [illegible] department amounting to $[illegible].

W. S. HILL [illegible] is making a sewing-machine [illegible] Mr. Hill is the inventor of this machine, which is called the "Novelty."

MARLBORO', 14 miles from Keene, 28 from Bellows Falls, and 88 from Boston; a flag station, on the Cheshire Railroad, in the town of Marlboro'. There are several ponds in this town, which are the sources of some of the branches of Ashuelot River. The soil is rocky, but good for grazing. Settled in 1760; incorporated December 13th, 1776. In 1868, there were 236 taxable polls; valuation was $[illegible]. There were 137 horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat stock, valued at $[illegible]; [illegible] sheep, valued at $[illegible]. Value of lands, $[illegible].

MARTIN'S FERRY, 5 miles from Manchester, and 13 from Concord; a summer station on the Concord Railroad, between Manchester and Concord, in the town of Hooksett.

MASON, 17 miles from Groton Junction and 52 from Boston; a country station and town on the Peterboro' & Shirley Railroad. [illegible] Settled in 1752. In 1868, there were 341 taxable polls in this town. Valuation, $[illegible]. There were [illegible] horses and mules, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep, valued at $[illegible]. Value of lands, $[illegible].

MASON VILLAGE, 24 miles from Groton Junction and 59 from Boston; a village containing one church; located in the town of Mason.

THE COLUMBIAN MANUFACTURING CO. was incorporated in 1828. [illegible] Capital, $[illegible]. [illegible]

This company gives employment to upwards of [illegible] hands [illegible]

J. L. CHAMBERLIN [illegible]

MAST YARD, 7 miles from the station in Concord; a station [illegible] the Concord and Claremont Railroad.

MELVIN'S MILLS, 25 miles from Concord; a station in the town of Warner, on the Concord and Claremont Railroad.

MEREDITH VILLAGE, thirty-seven miles from Concord, 109 from Boston, 152½ from Providence, R. I.; a village containing 3 churches, in the town of Meredith. This town was incorporated in 1767, and was first called New Salem. The soil is exceedingly fertile, the scenery is grand. Near the upper part of the town, the traveller passing along the road is presented with a very beautiful landscape on the East and South East; the placid Winnepisogee, the largest lake in New Hampshire, with its numerous islands, arrests the eye and bounds the circle of vision in a South Easterly direction; and on the North East, Ossipee mountain rises boldly to view. In 1868, there were 483 ratable polls. Valuation, $697,323; and the proportion on the State tax per $1000 was $4.68. There were 257 horses and mules, valued at $13,351: 1262 cows, oxen and neat cattle, valued at $35,-158; 1651 sheep, valued at $3,086. Value of lands, $383,231.

WAUKAWAN MANUFACTURING CO., D. S. Metcalf, Sup't. They occupy two buildings, 100x45 feet, 3 stories, and 60x 30, feet, 4 stories, for the manufacture of ribbed and plain cotton and woolen hosiery, turning out daily from 250 to 300 dozen. The motive power (water from Waukawan lake) is furnished from a 15 horse power overshot and 30 horse Leffel wheels.

This company's goods are sold in New York by Smith & Martin, No. 220 Church street.

JOHN A. LANG established the manufacture of piano-forte cases in 1858. He occupies a building 70x35 feet, and does a business of $15,000 per year. His power is furnished from a 20 inch Leffel wheel.

NATHAN B. WADLEIGH commenced the manufacture of lumber in 1849. Employs 30 hands, and does a business of $50,000 per annum.

MERRIMAC, a flag station, 7 miles from Nashua, 10 from Manchester on the Concord Railroad between Nashua and Manchester. A small village containing one church and one hotel.

HENDERSON'S MILLS. D. Henderson, Proprietor. This mill was started and run on carpet goods in 1846. Mr. Wm. Henderson, the present occupant of the mills, is running one set of machinery for making carpet yarn, 29 hand-looms for the manufacture of all wool ingrain carpeting. Mr. Henderson consumes about 50,000 lbs. of wool, producing about 50,000 yards of carpeting per year. 40 employees. The power is furnished from a Whitney's improved turbine wheel, 18 inch. under 22 feet head.

In 1859, he established a four-set flannel mill. Building build of wood, 64x32 feet, three and a half stories and basement, with L 48x32 feet, 1 story. Picker-house of brick and stone attached. He runs 1,400 spindles, 20 broad looms, and manufactures about 250,000 yards blue mixed twilled flannels per year. Consuming 120,000 lbs. domestic fleece wool. Employs 35 hands.

Power derived from a 30 horse power, Whitney's improved turbine wheel under 21 feet head.

He also started in 1866 a cabinet shop, building of wood, 48x32, two stories and basement; finishing shop of brick, 32x26 feet, two stories.

This part of industry is now carried on by Marcellus Houghton, who employs 20 hands, manufacturing black walnut and chestnut extension tables, glass frames, &c. Consumes from 130,000 to 150,000 feet of lumber per year.

The power is furnished from a Whitney's wheel, 24 inch. under 18 feet head.

MESSERS, 3 miles from Lawrence, and 23 from Manchester, a country station on the Manchester and Lawrence Railroad, in the town of Salem.

MILAN, a country station and town on the Grand Trunk Railroad, 139 miles north by east from Concord. This town was called Paulburgh until 1824. The Upper Amonoosuck and Androscoggin rivers pass the town. There are several ponds and some considerable mountains. In 1868 there were in this town 181 ratable polls; the valuation of real estate was $197,082; the proportion on a State tax of $1,000 was $1.32. There were 134 horses and mules valued at $9,188; 632 cows, oxen and neat cattle, valued at $20,204; 1,254 sheep, valued at $1,060; value of lands, $110,535.

MILFORD, 54 miles from Boston, and 11 from Nashua; a station and town on the Wilton Branch from Nashua. This town lies on both sides of the Souhegan river. The soil is black and deep, caused by the overflow of the river. In 1868 there were in this town 610 ratable polls; valuation $1,438,220; there were 306 horses and mules, valued at $28,796; 987 cows, oxen and neat cattle, valued at $52,326; 123 sheep, valued at $476; value of lands, $648, 343.

MILTON, 20 miles from Brock's Crossing, and 6 from Union Village; a station and town, on the Portsmouth, Great Falls and Conway Railroad. The village of Milton has 2 churches. The Salmon Falls river washes the whole Eastern boundary of the town, a distance of 13 miles, and a branch of the same river crosses from the southern part of Wakefield and unites near the centre of the eastern boundary. In 1868 there were 388 ratable polls. Valuation, $511,028. The proportion on a $1000 State tax was $3.43. There were 188 horses and mules, valued at $12,386; 897 cows, oxen and neat cattle, valued at $30,245; 786 sheep, valued at $1748. Value of lands, $276,478.

NASHUA, 46 miles north from Worcester, 40 west from Boston, 35 from Concord, 17 from Manchester. A city of 15,000 inhabitants, containing 11 churches, 3 hotels, 3 national and 2 savings banks, and two weekly newspapers, situated at the junction of the Nashua and Merrimac rivers, and the terminus of the Worcester, Lowell, Wilton and Concord Railroads.

The Nashua has a fall of about 65 feet in two miles; the volume of water at the dryest season of the year is 180 cubic feet per second.

Among other buildings erected in 1868 was the Methodist Episcopal Church, on Main street; a fine gothic structure, built of brick, and designed by I. B. Samuels of Boston, the cost being over $50,000. Dedicated July 22, 1868; Rev. Geo. Bowler, pastor. The pulpit is made from wood brought from the foot of the Mount of Olives, imported and presented to the church by R. T. Smith, agent of American Fan Company of this city. This church is acknowledged to be the finest in the State. In 1868 there were in this city 2,401 ratable polls; the valuation was $6,381,092; there were 633 horses and mules, valued at $59, 936; 707 cows, oxen, and neat cattle, valued at $35,276; 585 sheep, valued at $5,300; value of land, $201,588.

D. A. G. WARNER. GEO. H. WHITNEY.

WARNER & WHITNEY.

MANUFACTURERS OF

MACHINISTS' TOOLS,

[illegible]

STEAM HAMMERS, STATIONARY AND PORTABLE ENGINES,

[illegible]

EAST HOLLIS STREET, - - - - NASHUA, N. H.

HENRY HUTT, manufacturer of cotton batting, mattresses, railroad sheeting, [illegible] and all kinds of bedding; established business here in 1850. He employs 25 hands, and occupies two buildings, one of three stories, wood, 60 x 70, and one two stories, 60 x 60. A steam engine, manufactured by R. W. Pope & Co., of Boston, of 35 horse-power furnishes the power. These works consume two tons of waste paper per week, and turn a business of $60,000 per year.

LEWIS KIMBALL, manufacturer of bedsteads, is located on Water street. The business was established in 1864 by L. G. Sears & Co. Mr. Kimball employs 20 hands, consumes about 1,000,000 feet of lumber a year, and produces about 10,000 bedsteads during the same period. The power is furnished by an engine of 80 horse-power, manufactured by the "Corliss Steam Engine Co." of Providence, R. I. The main building is of wood, four stories high. Mr. Kimball makes a specialty of the cottage bedstead, a very convenient and pretty article of furniture.

JAMES P. HENDERSON, manufacturer of ladies' corsets, is located at No. 11 Water street. This business was established in 1867 by J. Mather, who was succeeded by Mr. Henderson in 1868. Mr. H. employs 25 hands, uses 16 looms and 200 spindles, and occupies 2 floors in a 4 story building, wood. Room No. 1 is used for a finishing room, No. 2 sewing room, No. 3 dry room, and No. 4 waste room, with five looms connected. The power is furnished by one of "Corliss" engines. The establishment consumes 35,000 pounds of worsted yarn per year, and produces 35 miles (averaging 110 yards) of corsetting per month.

WARNER & WHITNEY [illegible] the manufacture of machinists' tools, including lathes, planers, [illegible], [illegible], and gear cutting machines, and all kinds of machinery for [illegible] &c., in 1862 as successors to Geo. Warner & Whitney, who established the business in 1850. The works are located on East Hollis street, nearly opposite Wannalancit dam, and are one of the leading machinery establishments in New England, and have contributed much to making Nashua established as a manufacturing city. They occupy a building 180 x 60, shedding, wood, and for manufacturing purposes a warehouse 40 x 30, 2 stories, wood, with smaller buildings attached. They employ 70 persons, use a 40 horse power engine, made by Thomas Corliss, use 9 tons of anthracite daily, and do a business of $[illegible] annually.

GILMAN BROTHERS occupy a building on Main street, [illegible], three stories, for the manufacture of [illegible] board, [illegible] and [illegible] gaiters. Commenced in 1847 as Gill & Co. Gage, Murray & Co. succeeding in 1850. In 1866 the company was incorporated with a capital of $40,000 with liberty to increase to $[illegible]. The proprietors being V. C., H. W. and O. B. Gilman. They employ 70 persons and have a business in 1869 of $[illegible]. The power is supplied by a 30 horse-power Pawtucket engine with two steam boilers. The buildings are all warmed by steam and have every arrangement for the comfort and convenience of all concerned.

THE UNDERHILL [illegible] was incorporated 1873. Capital, $[illegible]. Wm. D. [illegible], President; Geo. W. [illegible], Superintendent; C. B. [illegible], Treasurer, Agent and Clerk. The building is [illegible] story. They employ 60 persons. The establishment is located in the [illegible] of Salmon brook, on the N. and L. Railroad, one mile from the city. They consume 180,000 pounds of wool, [illegible] pounds of [illegible] per year, 2,000 pounds of [illegible], and do a business

ness annually of $100,000; manufacturing axes, adzes, hatchets, &c. A 100 horse-power Turbine wheel supplies the power; the fall is 24 feet. Office, Federal street, Boston.

Vale Mills was incorporated in 1868. Capital, $300,000. Geo. Y. Sawyer, President, B. Saunders, Treasurer, A. H. Saunders, Secretary. This company are successors to the Harlow Mills, which were incorporated 1855. Capital, $100,000. B. Saunders, Treasurer, is virtually sole proprietor of this company, acting under an act of incorporation. The main building is 128x40, three stories, wood, with brick picker-house, engine and boiler-room attached; the weaving mill is 32x40, one story above basement, wood. Employ 75 persons. Consume 500 bales of cotton yearly, producing 72,000 yards of 39 and 28 inch fine shirtings, and printings 64 x64. The power is supplied by three Blake Turbine wheels running 5,000 spindles and 100 looms. The fall here is 30 feet, located on Salmon brook, a branch of the Nashua, taking its rise in West Killingly by running through Boylston, Lancaster, &c.

The Nashua Iron Co., was incorporated in 1847; capital $125,000; John A. Burnham, president; M. A. Herrick, secretary, treasurer and agent; office, 82 Milk street, Boston. The main building used for forging is 258 x 85, one story; one 180 x 85, one story, forging; a smith shop 225 x 40, one story; rolling mill and machine shop, 150 x 43, two stories; rolling mill 100 x 60, one story; all wood, besides other smaller buildings attached. They employ 100 persons; run five Watt's hammers and one Nassmith hammer, 5½ tons; five steam engines, three Tuffi's, one Warner & Whitney, and one built by the Company, with an aggregate power of 410 horse. They produce six tons of all kinds of forgings for locomotives, marine engines and railroad work, daily. This company consumes from 3,500 to 6,000 tons coal; 2,000 to 4,000 tons iron; 700 to 1,000 tons steel; &c., &c., per year, doing a business of about $100,000 per annum. S. K. Wellman, superintendent.

The Nashua Glazed Paper Company was incorporated in 1866; capital $40,000; Murray, Pierce & Co., proprietors. The building is located on Pearson avenue, and is 100 x 35, four stories, wood. They employ 40 persons, using two coloring, two cutting, two calendering, one trimming, two card cutting and 13 polishing machines, consuming one ton of paper daily, manufacturing, besides glazed paper, card board, etc. The business was established by D. Sargent & Co. in 1865. They use a forty horse-power engine and do a business of $125,000 yearly.

A. H. Saunders commenced the manufacture of machinery in 1867. He employs ten persons, making special machinery consisting of Ladd's card grinder, Saunders' patent sizing distributor, Flinn's patent rod and wire cutters, Wright's patent cloth-stamping machine, lathes, machinery clocks, and a variety of other cotton machinery, fixtures, etc.

Nashua Suspender Company, C. P. Danforth proprietor, occupies one floor of a building 70 x 40, commencing here in 1866. Employs 20 persons.

M. A. & K. F. Worcester commenced the manufacture of dry hop yeast in 1857. They occupy two buildings 40x80, two stories, and 38 x 60, three stories, respectively. Employ 20 persons, produce 150 gross daily and do a business of $100,000 annually.

C. D. & E. J. Copp occupy one floor in a building 20x40 for the manufacture of pocket books, commencing in 1866. Employ 15 persons.

Nashua Iron Foundry, C. Williams proprietor, Temple street. Information refused.

The Nashua Lock Company was incorporated 1860; capital, $60,000. A. C. Barstow, of Providence, R. I., President; C. B. Hill, Treasurer and Agent; F. O. Munroe, Superintendent. The business was established in 1832. The manufacturing building is 100x70, three stories, wood; iron foundry, 136x60; brass foundry, 50x30, besides small buildings attached. The works cover an area of 10 acres. Employ 150 persons, use 2 tons of iron castings daily, manufacturing locks and knobs, doing a business of $200,000 annually. A 65-horse power Corliss engine, Fairbanks' make, supplies the power. Salesrooms—139 Federal street, Boston; 77 John street, New York; 41 South Charles street, Baltimore.

J. D. Otterson commenced the manufacture of small castings in 1858. The main building is 230x40, used for moulding, with wing, 30x40; one, 110x40, also used for moulding, brick, all one story. Located between Quincy and Mason streets, near N. & W. Railroad depot. He employs 60 persons, produces 2 tons of castings daily, doing a business of $75,000 yearly. A 10-horse power engine supplies the power. Office, 4 Nutt's Block.

Nashua Skirt Company, Smith & Richardson, Proprietors, Pearson avenue near the post office, occupy one floor of a building 106x35, for the manufacture of hoopskirts, commencing here in 1865. Employ 40 persons, produce 30 dozen daily and do a business of $75,000 yearly.

The American Fan Company was incorporated 1867; R. S. Smith, Agent. They occupy one floor of a building 106x35, for the manufacture of cloth fans. Employ 75 persons, produce 4,000 fans daily when in operation, doing a business of $20,000 yearly.

Geo. W. Davis & Co. occupy a building 153x52, with ell, 42x18, one story, with engine and boiler room attached, 75x40, located on Mason st. on the line of the N. & W. Railroad, for the manufacture of steam engines, shafting and machines for boring steam engine cylinders. The business was established by George A. Rollins & Co. in 1853, the present firm succeeding in '63. They employ 40 persons, use 2 tons of castings daily and do a business of $100,000 yearly.

Fletcher & Webster occupy two and a half floors in a building 100x35, for the manufacture of black walnut furniture, bird cages, toys, &c., commencing in 1862, as successors to Fletcher, Farwell & Co., who established the business in 1857. Employ 40 persons and do a business of $40,000 yearly.

Francestown Soapstone Co., was incorporated, 1865. Capital, $300,000. Doctor F. H. Kelley, of Worcester, Mass., president; C. A. Gillis, secretary and treasurer; David Gillis, agent and superintendent; O. H. Birby, clerk. The establishment is situated on Bridge street, near the Concord depot and comprises a building 260 x 65; another 200 x 65, all one story, wood. They employ 70 men, manufacturing soap-stone goods of all kinds, including coal stoves and grates, wash tubs and sinks, wash bowls, table tops, factory rolls, &c. The many useful and ornamental articles into which this stone can be made is surprising. The quarry is located at Francestown, N. H., 24 miles northwest of this city, to be reached from Parker Station 9 miles distant. This quarry is said to be inexhaustible, and they claim it to be the best in the world. The many useful articles into which it can be made, is made more apparent daily. The latest thing being a flat, also a butter kneader, which are being introduced by another company who have not progressed far enough yet for us to report them, having just organized.

The Francestown Soapstone Co., have agents at 14 Marshal street, Boston, 602 Broadway, N. Y., and at Albany, N. Y., and also at Philadelphia, Penn.

Eagle Card Co., Gage, Morrill & Co., proprietors, Water street. Commenced business here in 1868, succeeding

the old Eagle Card Company, which was founded in 1854. Printers' cards, card-boards, and enamelled paper, collar board, &c., are manufactured here. This company employs 65 hands, and occupy one building, wood, brick walls, four stories, 115 x [illegible]; first floor is used for mixing purposes; second floor for packing room, store-room and counting-room; third floor for coloring by machinery; fourth floor for pasting and coloring by hand. The power is furnished by an engine of one hundred and fifty horse-power, made by the "Corliss Steam Engine Company," of Providence, R. I. This establishment consumes 12 to 15 tons of paper, and one-third of the same quantity of coloring, and have a capacity of producing 65 reams of paper and 15,000 sheets of card board per day. They make a specialty of steel blue, bronze, and black glazed papers. Sales room, No. 80 Nassau street, New York.

Eaton & Ayer, manufacturers of bobbins, spools, and shuttles, for cotton and woolen mills, commenced business in 1862. They employ 160 hands, and occupy 9 buildings, as follows: Brick shop, 99x50, 3 stories; 2 brick shops, 100x60, 1 story; boiler, engine and dye house, brick, 80x40; wood shop, 3 stories, 80x40; brick shop, 40x30, 2 stories; repair and blacksmith shop, 1 story, 30x60. An engine manufactured by the "Corliss Steam Engine Co.," of Providence, R. I., of 150 horse power, furnishes the power. They have also in use 2 tubular and 1 Harrison boiler, with a capacity of 200 horse power. The buildings are all heated by exhaust steam. 2,000,000 feet of lumber, and 12,000 pounds of steel are consumed, and $250,000 worth of stock are produced here during a year. This company formerly manufactured large quantities of stock for Mexico, and are now manufacturing for all sections of this country and England.

The Jackson Co. Indian Head Mills, was incorporated June, 1830; capital, $600,000, being one of the oldest and largest cotton manufacturing establishments in New England. J. S. Amory, Treasurer, A. P. Hussey, Agent and Superintendent, R. W. Lane, Paymaster. They occupy three mills, run 21,100 spindles, and 710 looms. Employ about 475 persons. Consume 1,250,000 pounds of cotton annually, producing 8,250,000 yards of 18, 40 and 36-inch sheetings and shirtings, using No. 14 yarn, 48 picks to an inch. 4 turbine wheels, with 18 feet fall, supplies the power. Selling Agents: Upham, Tucker & Co., Boston.

The Nashua Mills, located in this city, are as large if not larger than the above company. They were applied to for information, but declined giving any statistics whatever.

NEW DURHAM, 24 miles from Dover and 1½ from Alton Bay. A station and town on the Dover and Winnipiseogee Railroad. The surface of this town is very uneven; a portion so rocky as to be unfit for cultivation. The soil is generally moist, and well adapted to grazing. There are five ponds in the town, the largest Merry Meeting pond about two miles in circumference, from which a copious and perpetual stream runs into Merry Meeting bay, in Alton. Ela's river flows from Coldrain pond into Farmington, on which is a fine waterfall. The Cochecho also has its source here. There are several mineral springs in the town. Elder Benjamin Randall, the founder of the sect of free-will Baptists, commenced his labors here in 1780, and organized a church. He died in 1808, aged 60. This town was granted by Mason in 1749 and incorporated Dec. 7th, 1762. In 1869, there were [illegible] taxable polls in this town. Valuation of real estate, $150,972. The proportion on $1,000 State tax was $1.61. There were [illegible] horses and mules valued at $8,800; 787 cows, oxen and neat cattle, valued at $27,151; 582 sheep, valued at $798. Value of lands, $227,562.

NEWMARKET, 57 miles from Boston, 61 miles from Portland, and 101½ from Providence. A village and town on the Boston and Maine Railroad. Contains 4 churches, 1 Congregational, 1 Baptist, 1 Methodist and 1 Catholic. One national bank and one savings bank.

Piscataqua river passes through this town into Durham. The Lamprey river washes its N. E. boundary. The soil is good, and agricultural pursuits are crowned with ready success. This town was originally a part of Exeter and detached and incorporated in 1727.

The number of polls in this town, in 1869, were 455. The valuation, $855,000. The proportion on $1,000 State tax was $0.80. There were 164 horses and mules valued at $12,920; 400 cows, oxen, &c., valued at $17,411; 356 sheep valued at $1,07[illegible]; value of lands, $299,900.

Smart & Burnham occupy a two story wooden building, 84x40 feet, located about three-quarters of a mile from the railroad station. They commenced business in April, 1868, and have fifteen employees, producing 10,000 shingles and saw about 15,000 feet of lumber per day. Their machinery is driven by an engine of 50 horse-power, built by John F. C. Rider, of South Newmarket, N. H., furnished with steam from a tubular boiler built by the Swamscott Machine Company of the same place.

Lafayette Hill, manufacturer of nuts and bolts, &c. Commenced business in 1864. He employs 12 hands and does a business of $55,000 per annum. Size of buildings: one 30x40 feet, two stories high; blacksmith's shop, 30x30 feet, one story; store department and office 20x20 feet, one story high. He uses water power, having a breast wheel 14 feet in diameter, with seven buckets.

NEWMARKET JUNCTION, 55 miles from Boston, 56 miles from Portland, 98½ miles from Providence, situated on the Boston and Maine Railroad, contains 13 dwelling houses, 2 saloons and 1 hotel. Change cars here for Concord, Portsmouth and intermediate stations.

NEWTON, 41 miles from Boston, 40 S. E. from Concord and 27 S. S. W. from Portsmouth. A station and town on the Boston and Maine Railroad. The soil of the town is good. Settled in 1720. In 1869 there were 220 taxable polls in this town. Valuation was $288,000. There were 96 horses and mules valued at $6,051; 387 cows, oxen and neat cattle, valued at $17,081; 240 sheep valued at $1,218. Value of lands, $129,468. There are two churches and six school houses in the town.

NORTH BOSCAWEN, 55 miles from White River Junction, and 14 from Concord; a station in the town of Boscawen, on the Northern Railroad of New Hampshire.

NORTH CHARLESTOWN, 127½ miles from Boston, and 10½ from Bellows Falls, a station on the Connecticut River Railroad, in the town of Charlestown, [illegible].

NORTH CONCORD, 5 miles from Concord, 77 from Boston. A country station in the city limits, on the Boston, Concord and Littleton Railroad.

NORTHFIELD, 13 miles from Concord, and 85 from Boston; a country station and town, in Merrimac County, on the Boston, Concord and Littleton Railroad. The soil of this town is in some parts good; the best lies on the two ridges extending through the town. Chestnut pond lies in the east part of the town, and its waters flow into the Winnepisiogee three miles from its junction with the Pemigewassett. Sondogardy pond flows into the Merrimac. Near Webster's Falls the Winnepisiogee flows into the Pemigewasset, and the united streams form the Merrimac, on which are found the numerous manufacturing establishments that have contributed in a great measure to making New England what it is. Settled in 1760. In 1868 there were in this town 221 ratable polls. The valuation was $407,776. The proportion on a $1,000 State tax was $2.73. There were 141 horses and mules, valued at $6,251; 733 cows, oxen and neat cattle, valued at $33,858; 511 sheep, valued at $1,520. Value of lands, $389,750.

NORTH HAMPTON, 49 miles from Boston and 7 from Portsmouth. A country station and town on the Eastern Railroad. In 1868, there were in this town 214 ratable polls. Valuation, $399,191. There were 176 horses and mules, 487 cows and oxen and 366 sheep. Value of lands, $266,060.

NORTH HAVERHILL, 89 miles from Concord, 161 from Boston, 204½ from Providence. A station on the Boston, Concord and Littleton Railroad. Contains one church. A small village in the town of Haverhill.

NORTHUMBERLAND, a station and town on the Grand Trunk Railroad, 130 miles North from Concord. Groveton, located at Northumberland station, on the Grand Trunk Railroad, 122½ miles from Portland, has 300 inhabitants, one Methodist church, and one hotel. Principal business is Lumber. In the whole town there are nine schools. 160 voters. 3½ miles from this village is Northumberland, a village of 100 inhabitants. Here we strike the Connecticut river, the soil along the river is very productive, perfectly free from stone and gravel, and originally covered with a growth of butternut. The town was incorporated in 1779. Settled in 1767. In 1868, there were in this town 228 ratable polls. Valuation of real estate was $276,785. The proportion on $1,000 State tax was $1.86. There were 188 horses and mules, valued at $12,023; 676 cows, oxen and neat cattle, valued at $17,756; 1289 sheep, valued at $2,023. Value of lands, $145,527.

SMITH, HINDS & Co. occupy one floor of a three-story wooden building, 40x100 feet, for the manufacture of spring beds. Commenced business in 1867. Employ 2 hands, turn out 30 beds. Consume 200 lbs. of spring wire and 1,000 feet of lumber per week. Do a business amounting to $5,000 per annum.

MITCHELL AND WINSLOW occupy a two-story wooden building, 120x40 feet. Beam house, 56x36 feet, two stories. Leaching house, 30x50 feet, for the tanning of sole leather. Commenced business in May, 1864. Employ 8 hands. Run one Blake water wheel, 3½ft. and have one copper heater for leaching, 14 feet long, 10 feet in diameter. Consume 600 cords of bark and tan 4,000 ox hides, and do business amounting to $75,000 per year.

MAJOR LORD occupies a two-story wooden building, 50x30 feet, for the manufacture of lumber. Commenced business 1867. Employs 8 hands. The saws are driven by 2 water wheels, four feet each. Turns out 1,500,000 feet of lumber per year.

C. & C. P. RICHARDSON occupy a two-story wooden building, 40x100 feet. Store-house, 30x40 feet, dry-house, 20x 20 feet, for the manufacture of lumber. Commenced business in 1864. Employ 20 hands. Run 3 American Turbine water wheels. Turn out 1,200,000 feet of lumber per year.

ROBERT CHACE & Co. established business at this place in 1864, for the manufacture of straw board, and during the season, potato starch. Their power is Connecticut river. They also have a saw and grist mill on the Vermont side, taking their water from the same dam. They occupy about 14,000 feet of flooring in several different buildings, exclusive of saw and grist mill buildings. Employ from 12 to 15 men, and produce 2 tons of straw board, and 1½ tons of starch daily.

NORTH LISBON, 108 miles from Concord, 180 miles from Boston, 223½ miles from Providence; a flag station, in the town of Lisbon, on the Boston, Concord and Littleton Railroad.

NORTH STRATFORD, a village of 200 inhabitants, in the town of Stratford; on the Grand Trunk Railroad.

A. S. & E. PERKINS occupy a 2 story wooden building, 90x 18 feet; dry house, 25x30 feet; located near North Stratford station, for the manufacture of lumber, clapboards, shingles, and laths. Commenced business in 1865; employ 30 hands. Machinery is driven by 2 Blake wheels, 6 feet each, and 1 Chase wheel, 3½ feet diameter. Turn out 5,000,000 feet of lumber per annum.

NORTH WEARE, 19 miles from Manchester, a country station at the terminus of the Manchester and North Weare Railroad, in the town of Weare. The town of Weare was incorporated in 1764, and contains the Northwestern branch of the Piscataquog, which enters the western boundary from Deering. The town, though rather broken, is not mountainous. It received its name in honor of Meshech Weare, chief justice of the province of New Hampshire. In 1868, there were 540 ratable polls in this town. Valuation, $866,394; 344 horses and mules, valued at $20,855; 1,579 cows, oxen and neat cattle, valued at $58,221; 4,859 sheep, valued at $9,944. Value of lands, $424,106.

ROCKLAND MANUFACTURING CO., Charles Kelley, Agent. The Cotton and Woolen Factory Co., commenced the manufacturing of cotton at this place in 1814, and was continued by that corporation until 1845. At that time the business was purchased by Alanson Crane, of Lowell, who operated the mill a little more than one year. The present firm, Rockland Mfg. Co., was established in 1856, having purchased the property in February of that year. There are now in operation 2,126 spindles and 40 looms, besides other machinery for the manufacture of cotton flannels. The mill consumes

[illegible] pounds of cotton, and produces 10,000 yards Cotton flannels per week. Employs 15 hands. The goods are sold by Stanfield, Wentworth & Co., Boston and New York.

JOHN W. CHASE commenced the manufacturing of Chase's Patent Skirting Machines, in 1846. He occupies a building 64x22, 1 story, situated one mile from the depot. Employs 2 hands, and produces annually about 700 machines. The power is furnished from a water wheel.

NORTH WEARE WOOLLEN MILLS, established in 1851, for the manufacture of cassimeres, hosiery and stocks. The mill building is 80x30 feet, 3 stories, with an L 36x40. 18 hands are employed, who turn out 25 pieces or 700 yards of goods per week.

NORTON MILLS, a village of 600 inhabitants, located 161 miles from Portland, at Norton Mill station, on the Grand Trunk Railroad. The principal and only business is lumber. All of the houses at this station are owned by the Norton Mill Co. A large portion of the town is in Canada East, the boundary line passing through the village about 200 feet from the railroad station.

OIL MILLS, 11 miles from Manchester, a country station, on the Manchester and North Weare Railroad, in the town of Goffstown.

PARKER'S STATION, 10 miles from Manchester, a country station, on the Manchester and North Weare Railroad.

PICKERINGS, 6 miles from Dover, and 22½ from Alton Bay, a station in the town of Rochester, on the Dover & Winnipesaugee Railroad.

PLAISTOW, 38 miles from Boston, and 36 miles S. S. E. from Concord, a village and town on the Boston & Maine Railroad. This town was originally a part of Haverhill, Mass. A charter was granted after it was annexed to New Hampshire, in 1744. The soil is good, being a mixture of black loam, clay and gravel. In 1858 there were 187 ratable polls. Valuation $119,256; 99 houses and barns, valued at $9,322; 214 cows, oxen and neat cattle, valued at $8,840; 61 sheep, valued at $180. Value of lands, $184,[illegible].

PLACE'S, 14 miles from Dover and 14½ from Alton Bay. A station on the Dover and Winnipesaugee Railroad.

PLYMOUTH, 51 miles from Concord, 123 miles from Boston, 105½ from Providence, on the Boston, Concord and Lyndon Railroad; a village of 1500 inhabitants, containing 2 churches and 2 hotels. The Pemigewasset House, located here, is one of the noted summer resorts on the route to the mountains. The town of Plymouth is well watered. Besides numerous smaller streams, there are two rivers, Pemigewasset and Baker's, both of which are of considerable importance. They take their rise in the height of land between the Connecticut and Merrimac, called the Eastern Ridge. Baker's is 30 miles in length; the soil is tolerably good and is generally cultivated. Settled in 1764. The village is the head quarters on the celebrated Plymouth glove. This town in 1858 had 347 ratable polls. Valuation, $397,001; rate of taxation per $1,000 State tax, $4.01. There were 270 houses and barns valued at $21,632; 798 cows, oxen and neat cattle, valued at $20,648; 2,401 sheep, valued at $5,[illegible]. Value of lands, $[illegible].

T. R. HAWLEY occupies a cutting shop, 14 stories, 15x24 feet, for the manufacture of handsomed Plymouth lock gloves and mittens of the first quality. Commenced business in 1850; employs at their works 14 hands, besides from 150 to 200 stitches in different parts of the country, for sewing. This firm turn out from 2000 to 2,500 dozen gloves per year. Salesroom, No. 12 Elm street, Boston, Mass.

PORTSMOUTH. The city of Portsmouth covers an area of about 6400 acres, located on the Eastern Railroad, 57 miles from Boston and 11 miles from Portland, contains about 12,000 inhabitants. Incorporated in 1849. There are 10 churches here: 2 Episcopal, 1 Unitarian, 1 Baptist, 1 Universalist, 1 Unitarian, 1 Christian, one Freewill Baptist, 1 Second Advent and one Catholic. There are 25 schools here, of which, 2 are high, 1 boys and one girls, 6 grammar, 6 intermediate, 6 primary and 3 mixed. Whole number of children attending school, 1868, was 2,300, of which, 1279 were males and 1031 females. In this city there are 4 banks: the Rockingham National, organized April 1st, 1865, capital, $200,000; the National Mechanics and Traders Bank, incorporated Dec. 1844, capital, $[illegible]; the New Hampshire National Bank, capital, $150,000; and the First National Bank, organized, 1863, capital, $[illegible]. There are also 2 Savings Banks: the Portsmouth Savings Bank, incorporated 1823, and the Rockingham Ten Cents Savings Bank. The valuation of real estate in 1858, was $4,617,700, and the valuation of personal property was $2,380,726. Total of real and personal, $[illegible], the rate of tax was $2.20 on each $100.

MECHANIC ASSOCIATION was formed in 1802, for the encouragement of industry, good habits and of assisting the indigent. Connected with this association is a large reading room, on the corner of State and Pleasant streets, where all the leading magazines and newspapers of the day are upon file to which all the members and their apprentices have free access.

PORTSMOUTH ATHENÆUM, Market Square. Incorporated June, 1817. This institution is owned in one hundred shares of $100 each. It has a valuable library of over 10,000 volumes, besides a large number of newspapers and periodicals are also taken. Annual meeting first Wednesday in January.

Portsmouth is the only seaport in the State. It is built on a beautiful peninsula, on the south side of the river, and, as seen from the towers of the steeples, the river, harbor, points, islands and adjacent country, presents a delightful assemblage of objects. It is connected with Kittery and New Castle by bridges. Water of excellent quality is brought into the city and conducted into all the principal streets. The Piscataqua, as it passes this town, is from one-half to three-quarters of a mile wide and although the current is so swift as to prevent the river from freezing, yet it forms one of the most secure and commodious harbors on the United States, one which large ships may enter with perfect safety. The main entrance to the harbor, which is well possessed 33 forts, is on the N. E., between New Castle and Kittery, the other

entrance on the S. of New Castle, is called Little Harbor, where the water is shoal and the bottom sandy. About one mile below the town the navigation is rendered somewhat difficult by the rapidity of the current, the main body of the river being forced through a channel only about forty-five rods wide.

The Navy Yard is situated on Continental Island, one of the safest and most convenient on the coast. The proximity of Portsmouth to the ocean, its neatness, quietude and beauty, render it an agreeable residence and a fashionable resort in summer.

THE KEARSARGE MILLS, incorporated 1846, capital, $600,000. Are located on Hanover street, and occupy the following building, viz., a six-story brick mill, 204x70 feet, with two L's, 100x30 feet each and three stories. A waste house, 35x25 feet, 1½-stories, wood. Cloth room, 45x30 feet, 1½-stories, wood. A machine shop, 85x35 feet, two stories, wood; also a brick cotton house, 85x45 feet and two stories. This company are manufacturers of plain sheetings shirtings and satin jeans, also yarns for cotton hosiery. They have about 400 employees, and turn out about 65,000 yards of cloth per week, also 18,000 lbs. of yarn. The capacity of the mill is 444 looms and 27,000 spindles. Their machinery is driven by an engine of 300-horse power, built by the Corliss Steam Engine Company, of Providence, R.I., with 8 flue tubular boilers, with 9 of Miller's patent sections for generating steam attached. This company do business amounting to about $400,000 per annum. Wm. H. Thompson is treasurer of the company, whose office is at No. 16 Pemberton Square, Boston, Mass.

T. JONES & CO. occupy a two-story brick building, with basement, 210x48 feet, also a two-story wooden building, 70x60 feet, with a wing 75x20 feet, outbuildings, &c., located in the rear of 71 Islington street, for the manufacture of ale and malt. Commenced business in 1856. Have 25 employees, consuming about 60,000 bushels of malt and 30 tons of hops, and turning out annually 30,000 barrels of ale. Their machinery is driven by an upright engine of 15-horse power, also an engine of 4-horse power, both built by Campbell, Whittier & Co., of Boston, Mass., with 1 flue boiler, 50-horse power, built by the Swamscot Machine Co., of South Newmarket, N.H. which, in connection with furnishing steam for the engines, heat all the buildings.

M. H. GOODRICH occupies a two-story wooden building, 60 x 30 feet, as a currying shop and beam house. A tan-yard containing 48 vats, with outbuildings, &c., located at No. 1 North street, for the manufacture of all kinds of upper leather. Commenced business in 1837 and has 7 employees. Power furnished from one of Tuttle's water wheels.

JARVIS & BROTHER occupy a two story wooden building, 40x30 feet with an L, 40x20 feet; also a one story wooden building, 60x18 feet, located on Islington street, for the manufacture of wooden yarns and knitted woolen goods. Commenced business in 1851; have 25 employees and do business to the amount of $25,000 per annum. Their machinery is driven by an engine of twelve horse-power, built by Gilbert McCannon of Portsmouth, N. H., with one upright tubular boiler, twenty horse-power, built by Campbell, Whittier & Co. of Boston, Mass.

ROCKINGHAM MILLS. Incorporated June 26th, 1863. Capital $100,000. Charles L. Dalton, president; Henry R. Dalton, treasurer; manufacture braids, tapes and elastic fabrics.

CRITCHLEY & WHALLEY, manufacturers of Critchley's patent extension tools. Commenced business in 1868. They occupy two stories of a three story brick building, located No. 16½ Bow street, and give employment to eight hands. Their machinery consists of planers, lathes, drills and milling machines, and is driven by an engine of six horse-power, built by the Exeter Machine Co. of Exeter, N. H.

THOMAS S. NOWELL occupies a 3 story wooden building, 56x60 feet, located corner of State and Pleasant streets, for the manufacture of ladies' and gents' fine machine-sewed boots and shoes. He employs 125 hands, turns out about 100,000 pairs per year, and do a business to the amount of about $175,000. The business was commenced in 1853.

A. F. & C. DAVIS occupy a three story brick building, 30 x50 feet, located corner of State and Washington streets, for the manufacture of ladies' and gents' slippers; employ 25 hands, turn out about 30,000 pairs per year, and do business to the amount of $15,000. Commenced business in 1868.

KINNEAR & WATKINS occupy a 1 story wooden building, 50x75 feet, located on Railway wharf, Water street, for the manufacture of iron castings of all sorts. Employ 6 hands. Commenced business in 1868.

JOHN S. TREAT occupies a 2 story wooden building, 23x 46 feet, with an L 18x30 feet, located on Green street, for the manufacture of marble monuments, tablets, headstones, &c. Employ 9 hands, and do business to the amount of $13,000 per annum. Commenced business in 1866.

JAMES C. STEELE, manufacturer of extension tables, occupies one floor of a 3 story wooden building 30x45 feet, located on Green street, where he employs 3 hands, turns out 500 tables per year, and does a business of $6,000. Commenced business in April, 1867.

SAMUEL CLEAVES & SON occupy a 2 story wooden building, 25x75 feet, located on Elm street, for the manufacture of soap, candles, and tallow. They consume about 125,000 pounds of grease per year. The business was established in 1817, by Samuel Cleaves.

W. S. STEPHENSON, manufacturer of carriages and sleighs, commenced business in 1867. Gives employment to 12 hands, and does business amounting to $12,000 per year. The factory is a 3 story brick building, 22x45 feet, located No. 19 Bow street.

N. D. MILLER & CO. occupy the lower story of a 2 story brick building, 25x60 feet, located No. 16 Bow street, for the manufacture of brass castings, spikes, nails, rudder braces, and ship trimmings. Commenced business in Sept., 1867.

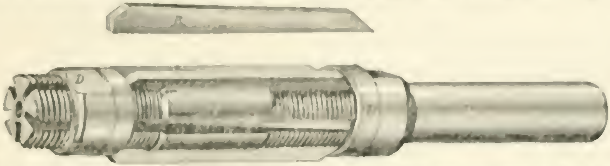
JOHN DONAVAN occupies a stone yard, with buildings, sheds, offices, &c., covering an area of about 6,000 square feet, located on Green street, for the manufacture of monuments, curbing, and all kinds of granite work. Gives employment to 20 hands, uses about 1,100 tons of granite per year, and does a business of $12,000 per annum. Commenced business in 1867.

C. J. FREFETHER & CO., manufacturers of tin and sheet iron ware, commenced business in 1866. They occupy a 2 story wooden building, 26x36 feet, located at No. 32 Penhallow street.

POTTER PLACE, 38 miles from White River Junction and 31 from Concord. A station in the town of Andover, on the Northern Railroad of New Hampshire.

PRATT POND, 20 miles from Groton Junction and 55 from Boston. A country station on the Peterboro' and Shirley Railroad.

CRITCHLEY'S PATENT EXPANDING TOOL.



FOR REAMING, DRILLING, BORING, TAPPING, [illegible] **MANDREL for TURNING,** and other work. As a **CHUCK DRILL,** [illegible] wanted. The subject of the above illustration is a tool that supplies a want in every machine shop. [illegible] number of grooves, [illegible] fitted with bits, cutters, or expanding tools [illegible] according to the nature of the work [illegible] of the tool. A screw thread is cut on the body of the tool, and a portion of it is left in the centre as a [illegible] to strengthen and prevent springing. The cutters are [illegible] at each end, and [illegible] by nuts, D, so that it is only necessary to slacken them off and slide the cutters down the tapered grooves to expand or contract their outside diameters and thus adapt them to all kinds of work. For further particulars apply to

CRITCHLEY & WHALLEY, Portsmouth, N. H.

QUINCY, 57 miles from Concord, 129 from Boston, 172½ from Providence, on the Boston, Concord and Littleton Railroad. A small country village of about [illegible] inhabitants. The people are engaged in lumbering.

RAYMOND, 23 miles from Portsmouth, and 18 from Manchester. A small village, having [illegible] churches in a town by the same name, on the Concord and Portsmouth Railroad. Two branches of the Lamprey river from Deerfield and Candia, unite in Raymond, and the waters of two ponds also fall into that river, as it passes through the town. The Patuckaway, from Nottingham crosses the N.E. corner of Epping. The soil is various, the meadows bordering on the river is productive. In 18[illegible], there were in this town 412 ratable polls. Valuation, $[illegible]. Proportion, on $1,000 State tax, $[illegible]. There were [illegible] horses and [illegible] cows, [illegible] and neat cattle and [illegible] sheep. Value of lands, $[illegible].

RAYMONDS, 15 miles from Manchester, a country station, on the Manchester & North Weare Railroad, in the town of Weare.

REED'S FERRY, nine miles from Nashua, 8 from Manchester. A country village in the town of Merrimack, on the Concord Railroad, between Nashua and Manchester.

ROBINSONS, 13 miles north of Manchester, and 5 south of Concord; a flag station in the town of Bow, on the Concord Railroad, between Manchester and Concord. The soil of the town of Bow is very uneven and hard, but productive when well managed. There is but one pond in any size, Turee Pond. Turkey river empties into the Merrimack at the Turkey Falls, near the northeastern part of the town. Samuel Welch, the oldest known resident of New Hampshire died here in 18[illegible], aged 11[illegible] years. In 18[illegible] there were [illegible] ratable polls in this town. Valuation $[illegible]. Number of horses and mules 174, valued at $[illegible]; [illegible] cows, oxen and neat cattle, valued at $[illegible]; [illegible] sheep, valued at $[illegible]. Value of lands $[illegible].

ROBY'S CORNER, 23 miles from Concord. A station in the town of Warner, on the Concord and Claremont Railroad.

ROCHESTER, is in Strafford Co., on the Portsmouth, Great Falls and Conway Railroad, and on the Dover and Winnipiseogee Railroad, 10 miles N.W. from Dover, 22 miles N.W. from Portsmouth, [illegible] E. from Concord and 78 miles in a Northerly direction from Boston, Mass. The town was incorporated in 1722 but was not settled until 1728. Timothy Roberts was the first settler. It covers an area of 22,000 acres. The present population is about [illegible]. The valuation of real and personal estate is $1,[illegible]. Rate of tax $[illegible] per $100. There are [illegible] schools and the number of scholars is about [illegible]. The town contains [illegible] churches; 1 Congregational, 1 Methodist, 1 Catholic, 1 Freewill Baptist, [illegible] Quaker and 2 Advents. There is also one Universalist Society who have no place of worship. The Rochester Social Library was organized in 17[illegible], and contains 1,[illegible] volumes. There are two Savings Banks: Norway Plains Savings Bank, incorporated 18[illegible], and the Great Five Cents Savings Bank, incorporated 18[illegible]. The number of banking establishments is two, the First National Bank of [illegible], incorporated 18[illegible], and the firm of John McDuffee & Co. private bankers. The finest building in the town is the McDuffee block, situated on Main street, in the square; it is three stories above the basement, with a handsome French roof, and has a front of [illegible] feet in depth. In the upper stories are two halls, one of which is [illegible], the other is [illegible]. The former is for the use of the public, and the latter is for the use of the Masonic fraternity. For a small town Rochester is pretty well supplied with hotels; there being several, the principal of which is the Dodge House, J. T. Dodge, proprietor. Amongst the prominent public men produced by this town, the following are worthy of mention: Hon. Noah Tebbets, Member of Congress, Hon. [illegible], Member of Con-

gress, Hon. James Farrington, Member of Congress, Hon. Jacob H. Ela, present Member of Congress, Hon. John P. Hale, late Minister to Spain, Jonathan Cushing, formerly president of Hampden Sidney College, Virginia; Professor Thomas C. Upham, for 33 years a professor in Bowdoin College, Hon. N. G. Upham, formerly Judge of the court of Common Pleas, of New Hampshire. Hon. C. W. Woodman, formerly Judge of Common Pleas and Hon. Theodore C. Woodman, late Speaker of the House of Representatives, Maine.

One of the most enterprising firms in the State is that of E. G. & E. Wallace, manufacturers of shoes. They occupy a three-story brick building, 36x160 feet, where they employ 300 hands in making shoes. They turn out about 300,000 pairs per year, worth about $275,000. They also use about 250 shoe boxes per week, which they manufacture themselves on the premises. They have a large tannery and currying establishment for the manufacture of upper leather mostly for their own use. In this branch of their business they employ 40 hands and turn out about 20,000 sides of leather per year, worth about $100,000. A large portion of their work is done by machinery, which is run by one engine of 50 horse power, with two tubular boilers of 50 horse power each, built by Chubbuck & Sons, of Boston, Mass. This business was established about fifteen years ago.

N. T. Kimball, occupies a three-story wooden building, 30x50 feet, for the manufacture of boots and shoes. Employs about 70 hands, turns out 80,000 pairs per year, and does business to the amount of $100,000 per annum. These goods are all manufactured for Loring & Searl, No. 78 Pearl street, Boston, Mass. Business was established in 1859.

S. J. & R. B. Wentworth, occupy a three-story wooden building, 30x50 feet, where they employ 20 hands in the manufacture of shoes, of which they turn out about 500,000 pairs per year, and do business to the amount of $70,000. Commenced business in 1868.

Norway Plains Co. Established 1846. No. mills, 3. Each 100 x 50 feet. Capital, $250,000. J. D. Sturtevant, Agent; Francis Cabot, Treasurer, Boston. The number of hands employed is 375. They manufacture blankets, flannels, tweeds, repellants, &c., and turn out 615,000 pounds per annum. Their mills are driven by one breast and three turbine wheels, with the aid of an engine of 45 horse power. They run 125 looms and 25 sets of cards. Office at Nos. 1 and 2 Milk Street, Boston, Mass.

Rollinsford, 71 miles from Boston, 40 miles from Portland, and 114½ from Providence, a small village and town on the Boston & Maine Railroad. In 1868 there were in this town 322 ratable polls. Valuation of real estate, $928,254. The proportion on a $1,000 State tax was $6.23. There were 108 horses and mules, valued at $7,237; 384 cows, oxen and neat cattle, valued at $13,370; 169 sheep, valued at $174. Value of lands, $315,967.

Rumney, 59 miles from Concord, 131 from Boston, and 174½ from Providence, R. I., on the Boston, Concord & Littleton Railroad. This small village romantically situated among the mountains, contains 3 churches. Farming and lumbering engage the attention of the people. The town of Rumney is watered by a branch of Baker's river which flows from Stinson's pond, and is called Stinson's brook. The pond is 400 rods long and 280 wide. Settled in 1765. In 1868, there were 316 ratable polls in this town. Valuation $396,144; the proportion on State tax of $1,000 was $2.66. There were 199 horses and mules, valued at $11,362; 734 cows, oxen and neat cattle, valued at $18,306; 2,270 sheep, valued at $4,306. Value of lands, $187,818.

Salem, 7 miles from Lawrence, and 19 from Manchester, a station and town on the Manchester and Lawrence Railroad. The town was incorporated 1750. The soil is generally fertile and the surface uneven. The Spiggot river passes through the town from North to South, receiving in its course numerous branches, and waters the different portions of the town. In 1868 there were in this town 465 ratable polls. The valuation was $583,821. There were 265 horses and mules, valued at $11,712; 669 cows, oxen and neat cattle, valued at $20,376; 177 sheep, valued at $488. Value of lands, $367,618.

P. C. Hall commenced business in 1857 for the manufacture of women's, misses' and children's pegged boots and shoes. He occupies a 4 story building, 80x40 feet; employs 100 hands, and does a business of $150,000 per annum.

Salmon Falls, 72 miles from Boston, 39 miles from Portland, 115½ miles from Providence, R. I., is a village of 1,100 inhabitants, situated in the town of Rollinsford, on the Boston and Maine Railroad. The Great Falls and Conway Railroad also passes through this place. It contains two churches, one Congregational and one Catholic. The number of public schools is three, and the number attending school is 175, also contains one Bank and one Savings Bank.

The Somersworth Machine Co. Incorporated in 1848, capital $50,000, occupy a foundry located about half a mile from the railroad station, and manufacture stoves and hollow ware, sinks, castings, &c. They have 45 employees, and turn out from two to three tons of casting per day. An overshot water wheel of six horse power drive their machinery, the fall being twenty feet. M. C. Burleigh is agent, and O. H. Lord, treasurer of this Company, office at Great Falls, N. H.

The Salmon Falls Manufacturing Co. was established in the year 1822. Their buildings comprise two mills, and one large store house for cotton and goods. They employ six hundred hands. Their water power is derived from the Salmon Falls river, on which they have two falls; the upper one being 18 feet and the lower one 23 feet in height. The goods they are manufacturing at present consists of sheetings, jeans, drillings, and cotton flannels. They run thirty thousand spindles, which keep employed 816 looms. During the year ending Nov. 28, 1868, they used in the manufacture of goods 2,177,512 pounds of cotton. The cost of manufacturing the same into goods during the above period amounted to $691,783.99. The selling agents are Messrs. Lawrence & Co., No. 17 Milk street, Boston.

Sanbornton Bridge, 18 miles from Concord, 90 miles from Boston. A village in the town of Sanbornton, on the Boston, Concord and Littleton Railroad. The village has three churches, one Bank and a very flourishing Seminary, which receives the patronage of the majority of the citizens of New Hampshire. Settled in 1765 and 1766, by John Sanborn and others. The town of Sanbornton in 1868, had 590 ratable polls, valuation, $908,359 and the proportion on the

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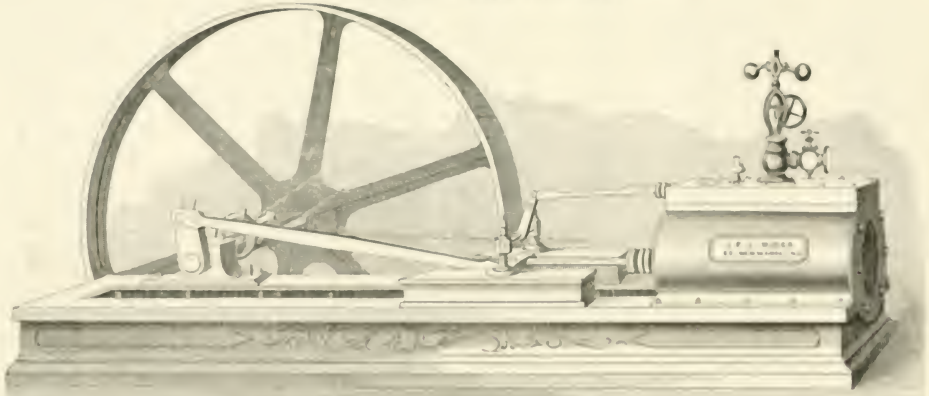

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State tax of a $1,000 was $6.09. There were 418 horses valued at $22,539; 1819 cows, oxen and neat cattle, valued at $45,168; 3891 sheep, valued at $7,753. Value of lands, $529,068.

SEABROOK, 42 miles from Boston, and 14 from Portsmouth, a country station and town on the Eastern Railroad, in Rockingham County. Settled in 1638. It derives its name from the number of rivers and brooks meandering through it. The inhabitants are engaged in agricultural pursuits and the fisheries. In 1868 there were in this town 374 ratable polls, valuation $363,717. There were 100 horses and mules, 388 cows and oxen, and 82 sheep. Value of lands, $148,632.

SHELBURNE FALLS, a country station situated in the town of Shelburne, on the Grand Trunk. The Androscoggin passes through the centre of this town into which fall the waters of Rattle river and some smaller streams. The soil on the banks of the rivers is very good, producing an abundance of grain and grass. As we rise from the rivers the soil is unfit for cultivation. Settled in 1769. Incorporated in 1820. In 1868 there were in this town 69 ratable polls. Valuation of real estate, $127,041. The proportion on a $1,000 state tax is 85 cents.

There were 66 horses and mules, valued at $5,020; 324 cows, oxen and neat cattle, valued at $11,374; 585 sheep valued at $1,260. Value of lands, $84,312. There is one hotel, one church, 318 inhabitants, 23,040 acres of land, and 90 children attending school. Tax $5 on $1,000.

SO. CHARLESTOWN, four miles from Bellows Falls and 114 from Boston. A post village in the town of Charlestown, situated on the Connecticut river, and on the Connecticut River Railroad has one church.

SOUTH DANBURY, 34 miles from White River Junction and 35 from Concord. A station in the town of Danbury, on the Northern New Hampshire Railroad.

SOUTH KEENE, 24 miles from Bellows Falls, 40 from Fitchburg, 90 from Boston 25 from South Vernon and 2 from Keene. The village is situated in a valley, back from the depot on the Cheshire Railroad, and hidden from view by hills, covered with timber, and contains about 200 inhabitants. Chairs are made here to quite a considerable extent. (See also Keene.)

SOUTH MERRIMAC, 5 miles from Nashua and 45 from Boston. A station in the town of Merrimac, on the Wilton Branch from Nashua. The town of Merrimac is watered on its Eastern border by the Merrimac river. Souhegan river enters this town from Amherst, pursues a winding course to the Merrimac, where it discharges itself one mile above Thornton's Ferry. The soil in various places is very fertile, but a considerable portion of the land is plain. The town was settled in 1733, incorporated, 1746. In 1868, there were 278 ratable polls. Valuation, $628,730. There were 162 horses and mules, valued at $9052; 692 cows, oxen and neat cattle, valued at $23,476; 338 sheep, valued at $552. Value of lands, $307,305.

SOUTH MILTON, 18 miles from Brock's Crossing and 8 miles from Union village. A country station in the town of Milton, on the Portsmouth, Great Falls and Conway Railroad.

SOUTH NEWMARKET, 54 miles from Boston, 104 from Portland; a village and town on the Boston & Maine Railroad. The town covers an area of about 10 square miles, and contains a population of 1,100. It was incorporated in 1849. There are two churches located here, 1 Congregational and 1 Methodist. There are 4 public schools, with an average attendance of 280. The number of voters is 238. Valuation in 1868, $358,664. There were 78 horses and mules, valued at $5,932; 213 cows, oxen and neat cattle, valued at $8,624; 205 sheep, valued at $429. Valuation of lands, $222,104. The surface of the town is hilly, and the manufacturing is that of machinery.

JOHN F. C. RIDER occupies a 2 story wooden building, 60 x34 feet, used as a machine shop, with a blacksmith's shop attached, 40x25 feet, located about half a mile from the railroad station, and manufactures stationary and portable steam engines, castings, wrought iron steam and gas pipe, and general machinery. He commenced business in 1864, and has 32 employees. The machinery consisting of engine lathes, planers, drills, and a variety of other tools used in the business, is driven by an engine of his own make, 15 horse power, furnished with steam from a tubular boiler, 18 horse power, built by the Swamscot Machine Co., of this town. The average amount of business per annum is $45.000. (See page 111.)

SWAMSCOT MACHINE COMPANY, Amos Paul, Agent. This company was established in 1846, for the manufacture of wrought iron pipes, brass and iron fittings, steam engines, boilers, machinery and castings. They employ 200 hands, doing a business of from $300,000 to $400,000 per annum. Their machinery is furnished with power from a 40-horse engine, of their own make.

SPRINGFIELD, 10 miles from Bellows Falls and 124 from Boston; a station on the Connecticut River Railroad, opposite the town of Springfield, Vt., in the town of Charlestown. The village of Springfield contains 4 churches, 1 national and 1 savings bank, and is located in the town of Springfield, Vt., on the Black River, two miles across and beyond the Connecticut River from the station. The land in Springfield is generally rich with a deep soil suitable for grass or tillage.

STARK, a village of about 60 inhabitants, in a town by the same name, situated on the Grand Trunk. It contains one Methodist church. The town was formerly named Piercy, but about 1835 it was changed to Stark as a compliment to the memory of Gen. Stark. It contains about 30,000 acres of broken uneven land. Settled in 1730, chartered in 1774, incorporated in 1795. In 1868 there were 40 ratable polls in this town; valuation of real estate $57,713; the proportion on a $1,000 for a State tax was 39 cents. Amount of taxable prop-

erty $467,118; rate of taxation $0.74 on $1,000; number of polls 125; 102 dwelling houses; 6 schools with 117 scholars; 1 Methodist Episcopal church. There were 80 horses and mules valued at $6,195; 471 cows, oxen and neat cattle valued at $15,043; 1,066 sheep valued at $2,466. Value of lands $84,542.

G. W. Coon & Co., manufacture all kinds of lumber; they employ 40 hands; occupy a building 70 x 180 feet; commenced business, February, 1868. Their machinery is driven by five water wheels, built by Thompson, Whitman & Co. They turn out 5,000,000 feet of lumber per year.

STATE LINE,

21 miles from Fitchburg and 71 from Boston, a station on the line that divides Massachusetts and New Hampshire.

STRATFORD,

a country station on the Grand Trunk, in the town of Stratford. This town lies on the east bank of the Connecticut river. It extends ten miles on the river, with fertile meadows; the soil, except along the river, is rocky, gravelly and cold. Bog brook and other small streams empty into the Connecticut here, and Nash's stream, across the southeast part of the town, into the Ammonoosuck. This town was incorporated in 1809.

Thomas Burnside, of this town, was one of Rogers' Rangers in the French war. Some years afterwards, he was desirous of becoming a justice of the peace. He procured Colonel Bart to come for him, and carrying with him to the governor, as a present, a firkin of butter and a piece of linen, waited upon Gov. Wentworth, at Portsmouth. He stated to the governor that the inhabitants of his town could not live peaceably any longer without a magistrate. The governor inquired how many inhabitants belonged to the town, and who was the fittest man for the office. Thomas answered that himself and his neighbor were the only inhabitants and himself the only man qualified for the appointment, for his neighbor was no more fit for a justice of the peace than the d—l was. The governor gave him his commission, and was highly amused with the singularity of the application.

In 1868, there were in this town 184 ratable polls. Valuation of real estate, $248,384. The proportion on a $1,000 State tax, was $1.67. There were 162 horses and mules, valued at $9,548; 887 cows, oxen and neat cattle, valued at $14,817; 1,062 sheep, valued at $1,374. Value of lands, $147,010.

STRATFORD HOLLOW,

a country station on the Grand Trunk Railroad, a village containing one church, three schools, and a population of 400.

McIntire & Hamer occupy a two-story wooden mill, 24 x 50 feet, located five miles from this station, for the manufacture of lumber. Commenced business in 1867. Employ three hands. Their machinery is driven by one Blake and one overshot water wheel, each 8 1-2 feet in diameter, turn out 1,000,000 feet of lumber per year.

J. N. Wheeler occupies a wooden building, two-stories, 24 x 32 feet, located 4 1-2 miles from this station for the manufacture of lumber. Commenced business in 1866. Employs three hands, runs one Blake wheel, 3 feet diameter, and one overshot wheel 2 1-2 feet diameter, turn out 2,000,000 feet of lumber per year.

R. B. Dickinson occupies a mill 32x40 feet, with addition, 30x40 feet, located one mile from this station, for the manufacture of lumber. Commenced business in 1858. Employs 5 hands, runs 1 Blake and 2 overshot water wheels, and turns out 150,000 feet of lumber per year.

E. F. Merrill occupies a wooden building 24x70 feet; dry shed 24x40 feet, 4 1-2 miles from the station, for the manufacture of lumber; commenced business in 1866, employs 12 hands, runs 1 Blake and 2 overshot water wheels, turns out 800,000 feet of lumber per year.

STRATHAM,

7 miles from Portsmouth; a station and town on the Concord and Portsmouth Railroad. The town is well adapted for agricultural pursuits. Granted 1716. Contains four churches, four schoolhouses, one store and post-office. Population 800.

SUNCOOK,

10 miles North of Manchester and 8 South of Concord. A manufacturing village in the town of Pembroke. The town of Pembroke is generally well watered. The Suncook on the S.E. boundary furnishes many valuable water privileges, and here is situated the village of Suncook, at the junction of the Suncook and Merrimac. Pembroke has a variety of soils, usually very productive. The village of Suncook has two churches and a population of 1000, increasing very fast. In 1868, there were in the town of Pembroke, 503 ratable polls. There were 128 horses and mules, valued at $14,572; 770 cows, oxen and neat cattle, valued at $130,868; 311 sheep, valued at $1,320; value of lands, $480,730.

The first cotton mill in Suncook was built in 1810 by Asa Robinson and Samuel Cofran. It passed through several hands, and about 1835, was sold for taxes. In 1840, it was torn down and a new mill built on its site. This mill was burned in 1855, and was replaced in 1866, by the Pembroke mill, which is still in operation.

SWANSEY,

5 miles from Keene and 18 from South Vernon; a village and town on the Ashuelot Railroad. The principal streams of this town are the Ashuelot and the South Branch. The former passes through Swansey in a S. W. direction and empties into the Connecticut at Hinsdale. This is an important stream and is navigable for boats as far up as Keene, excepting a place about the rapids at Winchester. The surface here is somewhat diversified with hills, valleys and swells of upland. There is one pond in the S. W. part of the town, the source of the South Branch stream. This town was granted by Massachusetts in 1733, afterwards by New Hampshire in 1753. In 1868 there were in this town 391 ratable polls. Valuation $620,243. There were 260 horses and mules, valued at $24,189; 815 cows, oxen and neat cattle, valued at $41,281; 1,302 sheep, valued at $2,874. Value of lands, 349,184.

The village contains one church, one hotel, about thirty stores, and about 125 population. Rate of of taxation two per cent.

THORNTON'S FERRY,

six miles from Nashua and 11 from Manchester; a small village in the town of Merrimac, containing one church, on the Concord railroad, between Nashua and Manchester.

TROYVILLE,

82 miles from Boston, 80 from Fitchburg, and 32 from Bellows Falls; a village of 2 churches, in the town of Troy, on the

Cheshire Railroad. The inhabitants are principally agriculturists. The town was taken from Marlborough and Fitzwilliam, and incorporated in 1815. In 1868 there were 171 ratable polls in this town. Valuation, $644,983. There were 192 horses and mules, valued at $8,642; 457 cows, oxen and neat cattle, valued at $21,760; 284 sheep, valued at $755. Value of lands, $175,714.

UNION BRIDGE, 22 miles from Concord and 94 from Boston, a small village in the town of Sanbornton, on the Boston, Concord and Littleton Railroad.

UNION VILLAGE, 26 miles from Brock's Crossing; a village at the terminus of the Portsmouth, Great Falls and Conway railroad, in the town of Wakefield. The village has a population of about 400, contains one district school and two churches. The soil of the town is generally good. Lovewell's pond in the South part of the town is about 700 rods long and 275 wide. Province pond lies between Wakefield and Effingham, and is 450 rods long and 400 wide. Pine river pond is the source of the river by that name, flowing N.W. into Ossipee lake. The principal branch of the Piscataqua has its rise in East pond, between this town and Newfield, Maine. In 1868, there were in this town 330 ratable polls. Valuation, $546,215. The proportion on a $1,000 State tax, $3.07. There were 178 horses and mules valued at $13,712; 1,185 cows, oxen and neat cattle, valued at $51,556; 706 sheep, valued at $2,147. Value of lands, $362,497.

WOOD & HANSAFORD, commenced business in 1865, for the manufacture of leather. They occupy two buildings, 30 x70 feet and 25x50 feet, containing 48 tan vats. Employ 6 hands, producing 400 sides per week. Steam furnished from a 15-horse power boiler, made by Swamscot Machine Co., of South Newmarket, New Hampshire. Power furnished from a water wheel.

A. MARLAND occupies a new wooden mill just started at this place, 110x24 feet, for the manufacture of flannels and blankets. He runs two sets of cards that consume from 250 to 300 lbs. stock per day. The power is supplied by water, with 10 feet head. Selling agents, Yelland, Ayer & Co., New York.

WALPOLE, 60 miles from Fitchburg, 4 from Bellows Falls and 110 from Boston. A village and town on the Cheshire Railroad. The town is beautifully diversified by hills and vales. The soil is very fertile. Cold river passes through the North part and forms a junction with the Connecticut. The village of Walpole is situated at the foot of Fall Mountain on a plain. In 1868, there were in this town 441 ratable polls. Valuation, $1,207,858.

WARNER, 19 miles from Concord, a country station on the Concord and Claremont Railroad, in a town by the same name. The town is watered by Warner river, a handsome stream which rises in the Sunapee mountain, in Newbury. The soil is generally good. There are four ponds in this town, Tom, Bear, Bagley and Pleasant ponds. Pleasant pond, the waters of which are clear and cold, deep, and of a greenish cast, has no visible inlet or outlet, and overflows its banks in the dryest seasons. In 1868 there were 486 ratable polls, valuation $836,717.

There were 270 horses and mules, valued at $18,196; 1,242 cows, oxen and neat cattle, valued at $50,811; 6,547 sheep, valued at $15,758; value of lands, $432,975.

WARREN, 71 miles from Concord, 143 from Boston, and 126½ from Providence; a country station and town on the Concord & Littleton Railroad, has 1 church. The town is watered by the northern branch of Baker's river, which has its source on the eastern side of Moosehillock mountain. Population in 1860, 1,152. Ratable polls in 1868, 213. Valuation, $265,125. Proportion on $1,000 State tax, $1.78. There were 179 horses and mules, valued at $9,847; 566 cows, oxen and neat cattle, valued at $20,431; 2,959 sheep, valued at $6,454. Value of lands, $163,267.

WATERLOO, 21 miles from Concord, a station in the town of Warner, on the Concord and Claremont Railroad.

WEIRS, 33 miles from Concord, 105 from Boston, 148 1-2 from Providence, on the Boston, Concord and Littleton Railroad, a country station on Lake Winnipesseogee. Passengers for the White Mountains take steamer here across the lake, 30 miles to Centre Harbor.

WELLS RIVER, 93 miles from Concord, 165 from Boston and 206½ from Providence. The Connecticut and Passumpsic Rivers Railroad and Boston, Concord and Littleton connect here. A village containing one church, one bank and two hotels, in the town of Newbury.

WENLOCK, a country station, on the Grand Trunk Railroad.

WENTWORTH, 67 miles from Concord, 139 from Boston, 182 ½ from Providence, a country station and town, containing 1 church; on the Boston, Concord and Littleton Railroad.

This town is watered by Baker's river, on which is a fall of 18 or 20 feet. The soil of the town is generally good, the lands in the vicinity of the rivers being of the first quality. Mount Cuba in this town contains a supply of good lime, which is sold low, the quantity is so great. The town received its name from Gov. Benning Wentworth. In 1868 there were 248 ratable polls; valuation $339,960, and the proportion on the $1,000 State tax was $2.28. There were 170 horses and mules, valued at $10,670; 735 cows, oxen and neat cattle, valued at $21,700; 2,028 sheep, valued at $4,110; value of lands, $168,200.

WEST ANDOVER, 37 miles from White River Junction and 32 from Concord, a station in the town of Andover, on the Northern Railroad of New Hampshire. Population, 100.

WEST CANAAN, 14 miles from White River Junction, and 55 from Concord; a station in the town of Canaan, on the Northern Railroad of New Hampshire.

WEST CONCORD, 3 miles from Concord station, and in the limits of the city, on the Concord and Claremont Railroad.

B. F. & D. Holden, manufacturers of twilled flannels, established the business in 18[illegible]. They own 2 mills. There is a 30 feet overshot wheel in mill No. 1, with about 35 feet head and fall, and 1 Whitney iron wheel in mill No. 2, with about 30 feet head and fall. They employ 60 hands, and run 6 sets of flannel machinery. Connected with the mills is their dyeing establishment, for dyeing wool, indigo blue and other colors.

WEST EPPING, about 20 miles from Portsmouth and the same from Manchester. A country station located in the town of Epping, on the Concord and Portsmouth Railroad.

WEST HENNIKER, 8 miles from Contoocook and 14 from Concord. A country station on the Contoocook River Railroad, in the town of Henniker.

WEST HOPKINTON, 3 miles from Contoocook, and 14 from Concord; a station in the town of Hopkinton, on the Contoocook River Railroad. Contoocook river flows from Henniker into the south westerly part of this town. In its course it receives Warner and Blackwater rivers and several large brooks, and empties into Merrimack river at Concord. Settled in 1740. In 1868 there were in this town 470 ratable polls. Valuation $847,117. There were 453 horses and mules, valued at $2[illegible],733; 1,621 cows, oxen and neat cattle, valued at $6[illegible]; 1,179 sheep, valued at $2,840. Value of lands, $[illegible].

WEST MILAN. A country station in the town of Milan, situated on the Grand Trunk Railroad.

WESTMORELAND, 54 miles from Fitchburg, 10 from Bellows Falls, and 104 from Boston, a village and town on the Cheshire Railroad, bordering on the Connecticut River. The town is watered by several small streams which empty into the Connecticut. The one running from Spafford Lake, in Chesterfield, is the largest. Settled in 1741. Incorporated 1752. The surface is less varied by mountains, rivers and ponds than the neighboring towns. In 1868 there were in this town 300 ratable polls, the valuation was $6[illegible].

WESTPORT, 8 miles from Keene and 15 from South Vernon. A country station in the town of Swanzey, situated on the Ashuelot Railroad.

WEST RUMNEY, 62 miles from Concord, 134 from Boston and 177½ from Providence; contains a few houses and one church. The people are mostly engaged in agricultural pursuits. Located on the Boston, Concord and Montreal Railroad, in the town of Rumney.

WILSONS, 18 miles from Lawrence and 8 from Manchester. A station on the Manchester and Lawrence Railroad.

WILTON, 55 miles from Boston and 15 from Nashua. A small village at the terminus of the Wilton branch from Nashua. It is a town by the same name, has a fertile soil. Souhegan is the principal river. The town has neither mountains, ponds, or swamps. In 1868, there were in this town 437 ratable polls, valuation $79[illegible]. There were 300 horses and mules, valued at $[illegible]; 995 cows, oxen and neat cattle, valued at $[illegible]; 171 sheep, valued at $[illegible]; value of lands, $[illegible].

Davis Manufacturing Co. This company was established in 1861, for the manufacture of carpet yarns. Their mill buildings, which they occupy, is [illegible] feet, containing one set of worsted machinery, 600 spindles, and 3 sets of dyeing machinery, 600 spindles. Employ 50 hands, producing 5,000 lbs. yarn per week, consuming 800 lbs. scoured and 500 lbs. [illegible] yarn daily. The mill is situated on the Souhegan river, one mile from the village. The motive power is furnished by a Turbine wheel of [illegible] horse power, under 11 feet fall. L. C. Tyler, is the resident superintendent and N. H. Daniels, Boston, treasurer and agent.

The Wilton Manufacturing Co. established business in 18[illegible], for the manufacture of carpet yarns. They occupy a building two stories high, with basement, 100x45 feet, with an L 72x16 feet. They make 140,000 lbs. of carpet yarns annually, and consume 200,000 lbs. of wool in the same time. They run 1,7[illegible] spindles. The factory is located on Souhegan river, 24 feet fall of water. The power is furnished by a 42 inch Swain turbine wheel, 100 horse power. H. A. Daniels, Boston, Mass., agent; F. G. Woodman, Wilton, N. H., superintendent.

WINCHESTER, 13 miles from Keene and 10 from South Vernon, a village located in a town by the same name, on the Ashuelot Railroad. The face of this town is diversified with hills and valleys, the soil is excellent. Ashuelot river passes through the centre of the town. The former name of the town was Arlington, and it was incorporated by its present name in 1753. In 1868 there were in this town 517 ratable polls, valuation was $[illegible]. There were 215 horses and mules, valued at $21,[illegible]; 1,518 cows, oxen and neat cattle, valued at $[illegible]; 1,158 sheep, valued at $2,[illegible]; value of lands, $[illegible].

The village has a population of 1,000, has bank, and hotel and three churches.

WINDHAM, 12 miles from Lawrence, and 14 from Manchester; a country station and town, on the Manchester & Lawrence Railroad. This town was originally a part of Londonderry, and was detached and incorporated in 1742. Policy pond lies in this town and Salem, about one-half in each. Cobbett's pond lies east of the centre of the town. The town is well supplied with small streams. In 1868, there were in this town 218 ratable polls. Valuation $[illegible]. There were 192 horses and mules, valued at $13,[illegible]; 496 cows, oxen and neat cattle, valued at $[illegible]; 115 sheep, valued at $1,[illegible]. Value of lands, $[illegible]. Rate of taxation, $[illegible] on $100. Poll tax $[illegible]. Acres of land, 15,744. One church, 7 school houses, with 175 children attending school. Population, 825.

WING ROAD, 120 miles from Concord, 192 from Boston, 235½ from Providence. The Concord & Littleton Road was built to this point and trains commenced running in May, 1869. The road is to be built through and connect with the Grand Trunk.

WOODVILLE, 93 miles from Concord, 165 from Boston, 208½ from Providence, on the Boston, Concord and Littleton Railroad, contains one church. Passengers for Littleton change cars here. The Amonoosuck empties into the Connecticut at this place.

N. C. STILES,

(SUCCESSOR TO WILLIAM STROUD.)

IRON AND BRASS FOUNDER,

— AND —

MACHINIST,

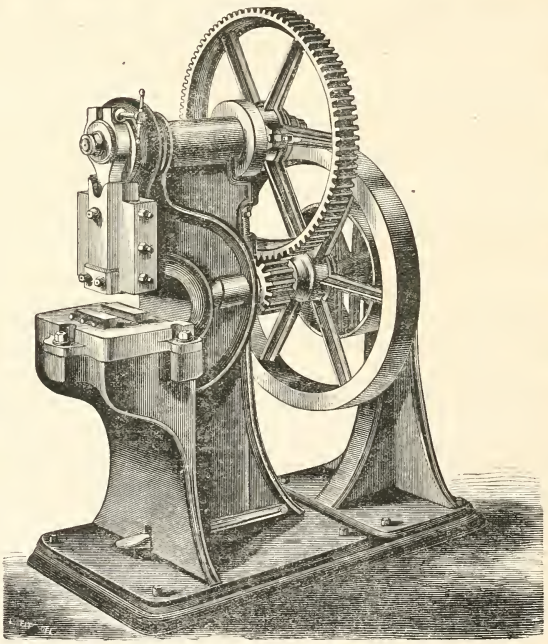
MIDDLETOWN, CONNECTICUT,

FORMERLY OF WEST MERIDEN.

MANUFACTURER OF

Patent Stamping and Punching Presses, Cutting and Stamping Dies,

GUN MACHINERY, MACHINISTS' TOOLS.



ALSO,

Shafting, Mill Gearing, Ship Work, Windlasses,

FORGING AND MACHINE JOBBING.

VERMONT.

ALBURGH, 23 miles from St. Albans, 1 mile from Rouse's Point, and 281½ from Boston; a village and town, on the St. Albans & Ogdensburg Railroad. The town was settled in 1782, and is bounded by Lake Champlain, except on the North, where it meets the Canada line, in north latitude 45°. The soil is good.

ALBURGH SPRINGS, 17 miles from St. Albans, 281½ from Boston. A station on the Ogdensburg and St. Albans Railroad. The village is about two miles from the station, and is quite a summer resort.

ARLINGTON, 39 miles from Rutland, and 16 from Bennington; a village and town on the Rutland & Bennington Railroad. The town was first settled in 1763. It is finely watered by Green river, Mill and Warm brooks, and Roaring branch, which fall into the Battenkill at the North part of the town.

ALBERT WALLACE established business in 1864. He occupies a building 30x40 feet for the manufacture of shaker pins and broom handles. Employs 8 hands, produces [illegible] boxes pins, and 3,000 gross handles, and does a business of $3,000 per annum. To drive his machinery, he uses a 30 horse power water wheel, made by Clark & Chapman of Bellows Falls, Vt.

BARNET, 50¾ miles from White River Junction, and 30 east from Montpelier across the country. Settled about 1768. Most of the inhabitants are of Scotch descent. There is good water power on the Passumpsic and Stevens rivers, on the latter are falls of 100 feet in the distance of 15 rods. This place is quite romantic and lies at the head of navigation on the Connecticut River. The village of Barnet has one church. Population, 2,000.

A. B. NORRIS & CO., Norrisville, near the above station. The manufacturing of bobbins, spools and cottage bedsteads was established by C. L. Norris over thirty years ago, and in 1864 was succeeded by A. B. Norris & Co., who have since added the manufacture of "cottage" beds. They occupy two buildings as follows, viz.: bobbin factory and bedstead shop, 70 x 30 feet, three stories; saw mill, 40 x 35 feet, two story; employ 30 hands. Their machinery consists of bobbin, spool and bedstead machines, all driven by water wheels. They do a business of about $30,000 per annum. Their works are located on the falls of the Passumpsic River, at its junction with the Connecticut. They have a fall of over 30 feet and power enough to run ten times the amount of machinery now used. This is considered one of the best water privileges in the State, and a mill could be so located as to obtain a fall of 25 feet, with railroad track running into the yard.

BARTON, 90 miles from White River Junction, 46 N. E. from Montpelier and 29½ from St. Johnsbury; a station and town on the Connecticut and Passumpsic Rivers Railroad.

This town derived its name from General William Barton, of Rhode Island, and was settled in 1796. The town is well watered by Barton River, which rises in Glover and empties in Memphremagog Lake. There are several ponds containing good fish.

The town has 953 polls, the real estate is valued on $[illegible], which is about ⅓ its real value. Last tax was [illegible] per cent. on the above ($[illegible]). Rate of taxation about $2.[illegible] on $[illegible]. Population of the town, 1,900. No. acres of land, 25,020. Barton village contains five churches and one hotel. There are three railroad stations in the town, viz.: Barton, South Barton and Barton Landing.

C. H. DWINELL established business in 1869. He occupies a three-story building, 30 x 50 feet, for the manufacture of furniture of every description, consisting of [illegible], round corner, [illegible] and [illegible], extension, kitchen and cabin tables, commodes, [illegible], sinks, &c. Also coffins and caskets. He employs six men with [illegible] and does a business of about $8,000 per annum. He uses a variety of machinery, such as planers, turning lathes, moulding, grooving, boring and [illegible] machines, circular and jig saws, mortisers, &c. The power to drive his machinery is supplied by a [illegible] water wheel of [illegible] horse power.

S. C. CUMMINS, manufacturer of doors, sash and blinds, occupies a three-story building, 28 x 40 feet. He commenced business in 1850 and employs three persons, who produce weekly 25 doors, 100 [illegible], and 50 window blinds, doing a business of $[illegible] per annum. A water wheel of 15 horse power drives his machinery, the fall being 12 feet.

BARTON LANDING, 93½ miles from White River Junction, and 32 from St. Johnsbury; a small village in the town of Barton, on the Connecticut & Passumpsic Rivers Railroad, contains 2 churches and 1 hotel.

BARTONSVILLE, 34 miles from Brattleboro', and 110 from Burlington, a station in the town of Rockingham, on the Rutland & Burlington Railroad.

BELLOWS FALLS, 220 miles from New York, 114 from Boston and 120 from Burlington. A small village on the Connecticut river, in the town of Rockingham, at the junction of the Cheshire, Vermont Valley and Rutland and Burlington Railroads.

PERRY & ELLIS, tanners and currers. Business established, Jan. 1st, 1867, by Perry & Ellis of this place, and Stevens and Barrett, of Boston. They occupy buildings as follows: one 120x40, three stories, one 65x32, two stories, another 30x26 two stories. They use 150 hides and 14 cords of bark per week. Employ 27 men, and the business to the amount of $125,000 per annum. Power supplied by water, with 20 feet of fall. Sabberton, 149 Congress street, Boston, Mass.

L. C. HUBBARD & SON manufacture sheepskins, rough upper leather and carry on the business of wool pulling, employing three buildings at Saxtons river, as follows: wool pulling, 35x100 feet, 3½ stories high; tannery, 30x90 feet, 2 stories and storehouse, 30x40 feet, 3 stories. They employ 12 men, and manufacture about 50,000 sheep pelts and 1000 slaughtered hides yearly, doing a business of $75,000.

Their machinery is driven by a 24-inch Clark & Chapman turbine wheel, under 16 feet fall. In the tannery they have a 15-horse power boiler, made by T. Cunningham, of Charlestown, Mass.

The members of this firm L. C. & Charles L. Hubbard, are also engaged with S. F. Perry, Esq., in the manufacture of and dealers in grain and feed, under the firm name of S. F. PERRY & CO. This firm commenced business in 1866, and have a working capital of $12,000. They occupy a three-story building, 30x60 feet, containing 2 runs of stone and one corn cracker, driven by two Clark & Chapman's turbine wheels, of 30-inch and 36-inch, under 12 feet fall.

CLARK & CHAPMAN, manufacturers of Chapman's improved turbine water wheels, circular saw mills, &c. Their works are situated about half a mile from the depot, where they employ 25 men, and do a business of $25,000 per annum. The business was established in 1861.

WM. P. GAGE, manufacturer of baskets. The mill is situated on Saxton's river, in Westminster, 1½ miles from Bellows Falls Station's main building, 100x60, 6 stories, storehouse attached, 60x30, 3 stories. Run by water and warmed by steam. 20 hands are employed in the manufacture of baskets, hunter and flour sack, making packets. The baskets are made principally from oak work, by machines and processes originated by the proprietor, which differ essentially from those in use by other manufacturers. Established in 1843.

BENNINGTON, 188 miles from New York, 35 miles from Troy, 55 from Rutland, and 160 from Boston, a village and town, on the Bennington & Rutland Railroad. The village is situated on the Walloomsac river, and contains about 2,500 inhabitants, 5 churches and 1 national bank. The town of Bennington was settled in 1761, and is situated 1,000 feet above the great rivers and the ocean. The streams are numerous and afford excellent mill sites. Bennington is finely located, for the valleys. On the border of the town, about 2 miles east of the Court House, the gallant STARK with a small band of "Northern Yeomen," celebrated for their bravery, gained an important victory over the British, August 16th, 1777. The fame of that battle is as imperishable as the mountains which overshadow the ground. The highest peak in the mountain range is Mount Anthony, which rises to the height of 2,000 feet, at the top of which is a tower from which can be seen on a clear day the cities of Schenectady and Albany, New York; also, the Catskill Mountains, and many land marks of interest in Massachusetts and Vermont.

GEORGE BENTON & SONS commenced business in 1802, for the manufacture of fine writing paper. Established by George Benton in 1802 or about that time. Their factory is situated on Main street, about one mile above the depot. Mr. Benton first commenced the manufacturing of writing paper, in a small way, at North Bennington, in 1845, removed to Bennington, where in 1850 he erected a building, 136 x54, 2½ stories high. His business increasing, he, in 1857, erected another 100x32, 2½ stories. The firm now employ 40 hands, running 4 engines, carrying 300 pounds each, and turning out 1,500 pounds finished paper per day. His motive power is furnished from a 30 horse power turbine, and a 15 horse power turbine wheel.

GEORGE MILLARD commenced the manufacture of all kinds of wire, both straight and taper, in 1857, occupying a 2 story building at the head of Pleasant street, 30x60; employing 10 hands, running 5 wirers and 2 tapering machines of Wm. R. Crowell's patent, turning out on an average 200 gross per day. His motive power is furnished by water.

H. E. & G. S. BRADFORD commenced in 1847 the manufacture of Lumber, running 4 mills, situated on Main street, about 1 mile from the depot. In 1864, they dissolved partnership, dividing the property, each carrying two mills. G. S. Bradford taking what was called Nos. 2 and 4, and H. E. Bradford, Nos. 1 and 3. H. E. Bradford took his son into partnership with him, under the name of H. E. BRADFORD & CO. His main building is of brick, with 2 wings 150x30, joined by a building 60x60, 1 story each. The building forms the letter H. The fire house attached to the right wing is 30 x 40, one story, used as a boiler house, containing a fine boiler furnished by Rice, Robbins & Co., of Plainfield, which is used for heating the building and filling the water in dye kettles, and to furnish steam for a 50 horse power engine made at Troy. They employ 100 hands, running 17 knitting machines, turning out 60 dozen drawers, shirts and jackets per day. Their motive power is furnished principally from 2 Dayton, O., wheels of 40 horse power combined. Their No. 3 mill is situated about 200 rods above, being a frame building, 32x60, 2 stories and attic; dye house of wood, 24x65, 1½ stories; dry house, of wood, 24x16, 2 stories; store house, of wood, 24x40, 2 stories. These last 3 buildings comprise all that directly belong to their establishment. Business amounts to $500,000.

G. S. BRADFORD commenced in 1866, with his two sons, under the name of BRADFORD & SONS. They employ 40 hands at both mills, and turn out 32 dozen knit goods per day, their motive power being furnished from 2 turbine wheels of 40 horse power and a portable engine of 6 horse power.

GEORGE ROCKWOOD & CO., commenced business in 1862, for the manufacture of shirts and drawers. His factory is situated on Main street, being a 2 story building, 30x60, running 5 cylinder knitting machines, employing 20 hands, turning out 65 dozen goods per day, using about 350 pounds of wool. Their motive power is furnished from a 15 horse power Tyler wheel. Their dry house is 20x40, 2 stories; dye house 16x16, 2 stories, and storehouse 20x40 1½ stories.

WALLOOMSAC HOSIERY MANUFACTURING CO., Abel, Nathan & Wood, proprietors. This firm commenced business, at the foot of Main street, in 1865, for the manufacture of ladies' and gents' under garments. Their main building, 166

x40, 2 stories, is used for finishing goods, on the first floor, where they employ about 40 females, running sewing machines, cutting out goods, &c. The second story is used for spinning and run 1,480 spindles. Their second building, 175x30, 3½ stories, is used for carding, knitting and dry rooms. In this building they run 22 circular machines [illegible] hand looms and 12 rotary knitters; stock house 100x40, 2 stories; bleach house, 20x40, 14 feet high; dry house 20x25, one story. They employ 20 hands, two-thirds being females, and turn out about 60 dozen goods, using 600 pounds cotton and wool per day. Their motive power is furnished from a turbine wheel of 75 horse power.

Booth & Valentine commenced business in 1865 for the manufacture of knit goods, occupying a building 26x116 feet, 2 1-2 stories, in rear of Pleasant Street. They employ 75 hands, running 4 sets of machinery, turning out 15 dozen of goods per day. Their motive power is furnished from a thirty-inch turbine wheel, under 16 feet head.

Bennington Machine Co. Olin Scott, Proprietor, who commenced the machinist's and machinery manufacturing business in 1848 at the head of Pleasant street, making a specialty in manufacturing gun powder, paper and marble machinery, occupying buildings, the number and dimensions are as follows: No. 1—40 x 150, 2 stories, L 40 x 25, 1 story machine shop; No. 2—50 x 150, 20 feet high, foundry; No. 3—40x60, 3 stories, pattern house and used by the knit factory; No. 4—30x40, 2 stories, office; No. 5—30x40, 1 story, blacksmith's shop; No. 6—[illegible] x 20, 1 story, store house; No. 7—40x100, 1 story, flask house. He employs 75 hands and does a business of about $100,000 per annum. This is one of the largest machine manufactories in Vermont. Established in 1848. His machine shop contains 16 engine lathes, of the Putnam Machine Co.'s make; 4 planers, by the New York Steam Engine Works, at Worcester, Mass.; 3 circular saws, 1 planer, (small) 2 lathes, 1 scroll saw; the three last machines are in the wood department. Uses about 400 tons of iron and from 300,000 to 400,000 feet of lumber per year, consuming about 200 tons of coal, and does a business of $125,000 annually.

Ames & West established business in May, 1866, for the manufacture of fine knit under-garments for ladies, gents, misses and boys wear. They occupy a mill building, built of brick, four stories in height, 70 x 30 feet. First story used for picking, opening, lapping, hand rubbing and knitting. Second story for spooling and knitting. Third story for carding. Fourth story for [illegible] and drying. Connected with the first floor is a scouring and dry house. Adjoining the mill is an L, two stories, 40 x 36 feet. First floor used for finishing; second floor for spinning. Conveniently arranged in the yard is a stock house, two stories, 40 x 25; also boiler house and bleach house. They employ 80 hands, run 4 sets machinery, turn out daily about 50 dozen undergarments, and do a business of $150,000 per annum. Their machinery is run by a water wheel of 44 horse-power, under a fall of 12 feet. Sole Agents, Hunt, Tillinghast & Co., New York.

C. S. Colvin, Birch oil manufacturer. The business was established in 1850 by Reuben Colvin and Asher Hill. Mr. Colvin occupies a two-story frame building, 40 x 30, [illegible] situated about 1½ miles from the depot. The works are run from 12 o'clock Monday morning until 12 o'clock Saturday night. Employ two men, and consume about 1,600 pounds of [illegible] per month. Machinery driven by an Olin Scott iron wheel, three feet diameter.

E. & L. P. Norton manufacturers of stone ware. Business established in 1811. They occupy a two-story building, 100 x 80 feet, employing from 12 to 15 hands and do a business of from $40,000 to $60,000 per annum.

L. Lyman & Sons, occupy the following buildings for the manufacture of cotton and batting; grist mill, 50 x 100 feet; saw mill, 22 x 50 feet; cotton mill, 40 x 40 feet; batting or paper stock mill, 20 x 50 feet, with sheds for drying, 300 feet long. Employ 20 men, and produce between 1,500 and 1,800 tons of cotton and batting per annum. Use 4 [illegible] water wheels of 175 horse-power to drive their machinery.

BETHEL,

BETHEL, 169 miles from Boston, 119 from Rouse's Point, and 30 from Montpelier; a village and town on the Vermont Central Railroad. The village contains about 250 inhabitants and 2 churches. The town was first settled in 1780, and was the first town chartered by the government. It is watered by branches of White river. The surface is broken and mountainous, but the soil is warm and good for grazing.

Harris & Janes, established business in 1861. They occupy two buildings, one 43 x 44, three stories, and the other 30 x 40, two stories. Employ 8 hands, manufacture chairs and light carriage stock, and do a business of $10,000 per annum. Use water power to drive their machinery.

Tucker, Davis & Co. commenced business in 1868 for the manufacture of shoe pegs. They occupy a 3½-story building, 30 x 60 feet, employing 18 hands, and produce 60 bushels pegs per day. The motive power is furnished from a 40 horse portable engine, made by Swamscot Machine Co., of South Newmarket, N. H.

Amos H. Flint occupies a building 30 x 36 feet, two stories, for the manufacture of butter tubs and carriage [illegible]. The business was commenced in 1865. The power is furnished from an overshot wheel, 14 x 1½ feet breast.

BOLTON,

BOLTON, 244 miles from Boston, and 40 from St. Albans; a village and town on the Vermont Central Railroad. A small village of about 100 inhabitants. The town was incorporated in 1763. Bolton lies on the western side of the Green Mountains. Onion river passes through the town.

BRADFORD,

BRADFORD, 29 miles from White River Junction, and 170 from Boston; a station and town on the Connecticut & Passumpsic Rivers Railroad, and on the Connecticut river. This is a pleasant farming town of good soil, and well watered by Wait's River.

Arnold Carriage Shop, George E. Brown, proprietor, commenced the manufacture of carriages and general wood work, in 1868. He occupies a 2 story building, 40x40; employs 4 hands.

BRAINTREE,

BRAINTREE, 182 miles from Boston, 80 from Burlington, and 100 from Rouse's Point; a village and town on the Vermont Central Railroad. The village is small and is located at the foot of the mountain. This is a good farming town and is watered by the branches of the White River.

BRANDON,

BRANDON, 42 miles from Bellows Falls and 50½ from Burlington, a village and town on the Otter Creek, and on the Rutland and Burlington Railroad. The village is situated about a quarter of a mile from the depot, contains four churches, one National Bank, and about 2,800 inhabitants. The town was settled in 1775

[illegible]

BROOKSVILLE. [illegible]

BURLINGTON. [illegible]

G. P. WOODS & CO.

MILLERS AND DEALERS IN

FLOUR, GRAIN AND FEED,

WINOOSKI FALLS, VT.

WOODS' BEST XXXX
LAKE CITY XXX
COLCHESTER XX
QUEEN CITY XXX
BURLINGTON XX
LAMOILLE X

WINOOSKI X

frightful chasms and then winding among the beautiful meadows, and the distant and lofty mountains which form the great outline, render the view from the dome of the University, one of the most variegated and interesting to be met with in our country.

B. G. Nicholls, commenced business in 1867, for the manufacture of board planers, shafting, water wheels, &c. The business was established about 1860, by J. P. Flanders, who occupies a room on the first floor in the Pioneer shop.

Mr. Nicholls has just completed a two-story brick building, 150x50, situated in the rear of the old shop. Employs 23 hands and doing mostly at present job work.

Brinks & Co., manufacturers of all kinds of castings. Employ ten hands, using about seven tons of iron for a weekly production. This foundry is a one-story building, 60x60, situated in rear of Pioneer shop. The business was established in 1860, by W. B. Brinks. The present firm has been in existence since 1867.

The Pioneer Shop was one of the first establishments built in Burlington, and to-day contains most of her manufacturers. It covers, with the necessary yard room, six acres of ground, and is now owned by B. S. Nicholls, who occupies a floor for the manufacture of machinery, &c. The building is situated on Lake street, under the hill, and has a front of about 400 feet. The motive power is furnished by a 180-horse power engine, made by the Corliss steam Engine Co., of Providence, furnished with steam from five two-flue boilers, also made by Corliss.

George D. Wright commenced business in 1865, for the manufacture of map and curtain rolls, slats, &c. Mr. Wright occupies a two-story building in rear of Pioneer shop, 30x40, employing five hands, running three Stretcher lathes, one sticker, one sander, two rumblers, one saw splitting and one cutting off saw, turning out 6,000 set rolls and slats per month.

Chase & Smith commenced the manufacture of doors, sash and blinds, in 1867, occupying a room on the first floor of the Pioneer shop, 50 x 100. The business was established in 1839, by E. W. Chase.

They employ 30 hands, and run 3 stickers, 2 power, morticing machines, 1 foot morticing machine, 4 circular saws and tables, 1 cutting-off saw and table, 1 swing saw, 1 turning lathe, 1 jig saw, 1 Daniel's planer, 1 surfacing planer, 1 slat planing machine, 1 boring machine, 3 wiring machines, 1 mitering machine, 1 groover, 1 tenoning, 1 shaping, and 2 blind slat tenoning machines.

Wing & Smith commenced business in Pioneer shop in 1853, for the manufacture of lasts, boot and shoe trees and crimps. They occupy 4 rooms on first floor, employing 15 hands, turning out 1,200 lasts and from 12 to 15 set of boot and shoe trees per day. Motive power furnished with the rooms.

C. L. Nelson's establishment for the manufacture of woodseat chairs, tables, bedsteads, &c., is situated on the Winooski river, a few rods above the cotton mill. Mr. N. commenced business in 1840, and now occupies a three-story wooden building, 60 x 40 feet, employing 15 hands, and turning out about 1,000 chairs and 120 bedsteads per week, besides tables, stands and other stock.

His motive power is furnished from a 3½ feet turbine wheel, under 16 feet fall—64-horse power.

G. P. Woods & Co. commenced business on the left side of the Winooski river, opposite Winooski village, in 1865, for the manufacture of flour and feed, and dealers in grain.

Their flouring mill is 65 x 50 feet, eight stories, containing six runs of burrs, with capacity for turning out 600 barrels flour every 24 hours. Attached to this building on the north, is a wing 28 x 30 feet, three stories.

The custom mill, where all the grain is ground for farmers and others, is a four story building, 75 x 40 feet. This mill contains four run of burrs.

They employ 30 hands and grind about 300,000 bushels grain per year. They derive their motive power from eight Leffel wheels 26½ inches, under 21½ feet fall, and six Tyler wheels—4 wheels of 30 inches, and two 36 inches—under 15 feet head; combined horse power about 450.

The Burlington Cotton Mill, situated opposite the village of Winooski, was incorporated in 1866, with a capital of $100,000. L. R. Hopkins president; J. Earl, treasurer, and H. W. Barrett, agent.

This company manufacture 56 x 60 print cloths. One of the first owners of this mill, and the first man who run the machinery was J. D. Allen, who established the business in 1844; commencing the manufacture of cotton cloth, running only 500 spindles. Since that time the business has increased, and now the Burlington Cotton Co. are running 5,500 spindles, 125 looms, turning out 24,675 yards cloth per week. They employ 100 hands, and use about 650 lbs. cotton per day. From an 80-horse power turbine wheel they derive their motive power.

E. C. Loomis & Son, commenced business in 1869, for the manufacture of leather.

In 1790, Mr. Horace Loomis established the business, starting the first tannery in, or about Burlington, and continued until 1832, when he was succeeded by his son, E. C. Loomis. The buildings erected by his father, stood until 1868, when Mr. Loomis had them torn down and erected a fine three story frame building, 60 x 54 feet. January 1,

GEO. D. WRIGHT,

MANUFACTURER OF

MAP AND CURTAIN ROLLS

AND SLATS,

AT WHOLESALE.

Any length size, quantity & quality, at short notice.

ALSO

MOP AND BRUSH HANDLES

[illegible]

PIONEER SHOP, BURLINGTON, VT.

1869, Mr. E. C. [illegible] took his [illegible] partnership with him. They employ [illegible] hands, and turn out about 175 sides leather per week; using 250 cords hemlock bark per year. They derive their motive power from a 20 horse-power engine with two flue boilers, made by [illegible].

Kilburn & Gates, commenced business in 1868, on Lake street, in [illegible] shop, for the manufacture of cottage furniture. In the spring of 1869, they removed to their new buildings on Pine street, 152 x 50 feet, two stories; and an ell 44 x 30 feet, two stories. Office building, 30 x 60 feet, one story.

They employ 120 hands, turning out from 100 to 120 suits per week, using from 1,000,000 to 1,500,000 feet of lumber per year.

As soon as the goods are made, they are shipped to their sales-rooms in Philadelphia, where they employ 100 hands in finishing them. Their salesrooms are situated at [illegible] Market, and from 610 to 617 Commerce street.

Their motive power is furnished from a Babcock & Wilcox engine, 100-horse power, furnished with steam from [illegible] flue boilers, the latter built by the Atlantic Works, of Boston.

CASTLETON, 10½ miles from Rutland, 80 from Albany and 223 from New York. A village and town at the junction of the Rensselaer and Saratoga Railroad, and its branch the Rutland and Washington Division. The village is [illegible] and attractive. The main street is broad and lined on either side with beautiful residences. The place contains four churches, one bank, the Castleton seminary and State Normal school, under the charge of R. Harris, Esq., and a population of about 1200. The Castleton river waters the town; the surface is rough and hilly, but there is some rich land. The scenery in the town, and particularly in the vicinity of the village, is varied, rich and attractive. Settled in 1770.

Adams Manufacturing Co., manufacturers of white soap stone pencils, was commenced in the year 1864, by James Adams and continued by him until 1866, when a partnership was formed with H. O. Brown, under the name of Adams & Brown, and continued until 1868, when D. R. Satterlee became a partner, under the firm name of Adams, Brown & Co. The following year, by an act of legislature, it was incorporated as the Adams Manufacturing Co., with a capital of $[illegible]. J. Adams, president; D. R. Satterlee, vice-president; H. O. Brown, Secretary. The celebrated quarries from which the white soap stone is quarried, is situated near Lake Bomoseen, in Castleton, near to which is their present pencil factory, [illegible], which was built 1869, with one of Woodruff & Beach's 80-horse power engines, and valuable machinery for turning out 100,000 pencils per day. The company employ about 100 workmen, claiming to make a more perfect and superior pencil than has ever been offered to the trade, which are extensively sold in all parts of the United States.

Barrows & [illegible]. This firm commenced the manufacture of [illegible] about 18 years ago, in a very small way. They occupy two buildings. Employ six hands. Their power is furnished from a 12-horse power portable engine, built by J. C. Hoadley, of Lawrence, Mass.

CAVENDISH, 22 miles from Bellow's Falls, 40 from Rutland, and 136 from Boston; a village and town on the Rutland & Burlington Railroad. The town of Cavendish was settled in 1769. It is watered by Black river and Twenty Mile stream, which afford a good hydraulic power. Along the streams the soil is excellent. The highlands are good, but best adapted to grazing. This town presents a great variety of [illegible] scenery.

CENTRE RUTLAND, 65½ miles from Burlington, and 1½ from Rutland; a station on the Rutland & Burlington Railroad.

CHARLOTTE, 11½ miles from Burlington, and 108 from Bellows Falls; a village and town on the Rutland & Burlington Railroad, and on Lake Champlain. A part of the town gradually slopes down towards the lake, and is very productive.

CHESTER, 13 miles from Bellows Falls, 106 from Burlington, and 130 from Boston; a village and town on the Rutland & Burlington Railroad, settled in 1764. The land is uneven, but fertile and productive.

This town has a population of 2,120. It contains 23,000 acres of land, the valuation of which is $[illegible]. The valuation of the personal estate is $[illegible]; total valuation of real and personal estate, $[illegible]. The grand list for taxes is $[illegible]. The town is free from debt, having raised a sufficient amount of money the last year to extend its indebtedness. The town contains four villages: South and North Chester, Depot Village and Gassetts. The two first are equidistant from the Rutland & Burlington Railroad, which runs

CHASE & SMITH,

Manufacturers of

SASH, DOORS AND BLINDS,

[illegible] and Mouldings of every description.

All kinds of [illegible] and [illegible]. Also all kinds of [illegible].

South End Pioneer Shop, - - - - First Floor,

BURLINGTON, VT.

Connected with the above establishment is

E. C. [illegible],

ARCHITECT AND GENERAL DESIGNER,

who will furnish designs, details, specifications and estimates for all classes of Buildings, promptly and upon reasonable terms.

through the town north and south, viz.: one half mile from the railroad station. Gassetts is four miles from the main villages in a northwesterly direction. There are three post offices in the town, viz.: Chester, North Chester, and Gassetts. South Chester is situated on the west branch of the Williams river, and North Chester is on the east branch. These two villages are only one mile apart, and in a short time will be joined, as Depot Village is the connecting link between the two. There are four churches in the town, viz.: The Episcopal, Congregational, Baptist, and Universalist, The Episcopalians will erect a new church edifice this year. The other denominations have elegant and spacious houses for worship. The three former are in South Chester, the latter in North Chester. There are 5 hotels in the town. Two, the Ingraham House and the Eagle Hotel, are located in South Chester. The former is one of the finest hotel structures in the United States, and has a national reputation. The Chester House and Central House are both new houses, and are centrally located in Depot Village. The Union House, situated in North Chester, is one of the oldest hotels in the State, and was formerly kept by those prince of landlords, Col. E. Ingraham and P. H. Robbins, Esq. The town has fifteen mercantile establishments, all of which do a large business, as Chester is the commercial centre of 25 towns.

Chester contains one of the oldest and most flourishing literary institutions in New England, having been established in 1814. The Masonic fraternity, the Inependent Order of Odd Fellows and the Order of Good Templars, each have flourishing lodges. The land is in a high state of cultivation, and returns large incomes to the producer. The inhabitants are noted for their wealth, refined intelligence and generous hospitality. The town has become a famous resort for parties who are desirous of escaping the dust, heat and turmoil of metropolitan life, its broad and shaded streets, its pleasant drives, romantic walks, its wild and picturesque, and its neat comfortable farm-houses, render it one of the most delightful retreats in New England for summer tourists. Large parties from the cities of Washington, New York, Boston, Providence and other places, visit here every summer. Mineral springs, of rare medicinal properties, have been discovered. A granite ledge of a quality equal to the celebrated Quincy granite has recently been brought to light by Professor Hagar, State Geologist, and is now being successfully worked. There are four large carriage and sleigh manufactories, a large boot manufactory which employs a number of men through the year, a large chair shop and a large cabinet and toy shop.

Chester is growing in wealth and population, and for the man of business, the invalid, or the searcher after a quiet home, among refined and enlightened people, remarkable for their thrift and enterprise, Chester presents inducements rarely equalled in a New England town.

Chester Boot Co. This company occupy a four-story and basement building, 34x50 feet, situated half a mile from the depot. They employ from 25 to 40 hands, manufacturing thick gents and calf boots, doing a business of about $50,000 per year.

The following establishments located in Springfield can be reached from Chester station.

Gilman & Townsend, machinists and manufacturers of improved last machines. Business commenced in 1861. They occupy a building, 38x64 feet. Employ six hands, doing a business of about $8,000 per year. The motive power is furnished from a Tyler wheel of 12-horse power.

Prize Churn Co. manufacture churns and dairy thermometers. Manufactured last year 2,000 churns and 500 gross thermometers. This year the business has been doubled. Business done for 1868, amounted to $16,000. A Tyler wheel of twenty-five horse power, under 16 feet fall, runs the machinery.

Ball & Thompson occupy a two-story wooden building, 100x40 feet, for the manufacture of scythe snaths, of which they make some 10 different varieties, giving employment to forty men. They claim that their snaths stand at the head for quality and style of finish, and in the various markets in this country, are regarded as the standard.

James Mitchell & Co. The manufacturing of plows, cultivators, &c., was established by this firm in 1846. They occupy four buildings, attached, making a front of 206 feet, as follows: Scythe shop, two stories, 36x40; plow cultivator, harrows, &c., shop, three stories, 54x40; foundry, 90x40, sixteen feet high; storehouse, two stories, 26x31. The machinery in the first and second buildings is driven by a turbine wheel, under six feet fall. Employ 18 men, doing a business of about $50,000.

Holmes, Whitman & Co., established in 1852, the manufacture of fancy cassimeres. Employ 44 hands, occupying a three-story building, 80x46, producing about 110,000 yards yearly. The motive power is furnished from a Tyler wheel, under a 22 feet fall.

CLARENDON, 72½ miles from Burlington and 46 from Bellows Falls, a station and town on the Rutland & Burlington Railroad, and Rutland & Bennington Railroad. There are several small settlements in the town hardly large enough to be called villages, called Clarendon Springs, Clarendon, North Clarendon, East Clarendon, and Chippenhook. There are two churches, ten school houses, one hotel, and a population of 1,400.

COLCHESTER, 12 miles from Burlington and 20 from St. Albans; a village of about 50 inhabitants, situated on the Vermont Central. A Flag station in the town of Colchester. The town is pleasantly situated at the head of a bay on the east side of Lake Champlain. The town is well watered by Winooski river and some smaller streams. First settled by Gen. Ira Allen, in 1774.

COVENTRY, 100 miles from White River Junction and 39¼ from St. Johnsbury, and 47 northeast from Montpelier, a station and town on the Connecticut & Passumpsic Rivers Railroad. A good township of land, watered by Barton's and Black rivers, which empty into Lake Memphremagog. Settled in 1800.

Contains one Cong. church; one hotel; 215 polls; 17,252 acres of land, valued at $276,855. Population, 1,000. Rate of taxation, 40 cents.

Simon Wheeler commenced the tanning of hides in 1868. He occupies a building 40x50 feet, containing 27 vats. He employs three hands and manufactures about 4,000 sides leather per year, mostly slaughtered hides. His machinery is driven by water from the Black river, on which he has a fall of eight feet.

CUTTINGSVILLE, 77 miles from Burlington, 42 from Bellows' Falls; a flag station on the Rutland & Burlington Railroad, in the town of Shrewsbury. This is a mountainous township, having Shrewsbury Peak within its limits, a summit of 4,034 feet above the level of the sea. Mill and Cold rivers and Pearl's and Ashley's ponds water the town and fall into Otter creek.

There is some good land in this mountainous township, sheep being raised to quite an extent. The village has about 224 inhabitants, and the real estate valuation is set for being $30,000. It has one church, one hotel, a carriage manufactory, saw mill, grist mill and chair-stock manufactory.

DANBY. (See Mt. Tabor and Danby.)

DUMMERSTON, 5 miles from Brattleboro' and 23 from Bellows Falls. A village and town on the Vermont Valley railroad. The village contains about 600 inhabitants. West river passes through the town. The surface is rough and hilly, but best adapted to grazing.

EAST DORSET, 25 miles from Rutland, and 30 from Bennington, a small village of about 600 inhabitants, and one church, situated on the Rutland and Bennington Railroad, in the town of Dorset. The quarrying of marble, which is found here in abundance is carried on quite extensively.

D. L. Kent & Co.—In 1862, D. L. Kent and S. F. Pruyn commenced the manufacture of Italian marble. They have lately erected new buildings, by which they have doubled their former capacity. Employ 25 hands. Use an engine of 60 horse power for driving machinery. Steam furnished from a tubular boiler, built at Newburgh, N. Y. At South Dorset they have another establishment carried on under the name of S. F. Pruyn & Co. Here they employ 30 men and do a business of $30,000 per annum. From a turbine wheel under 17 feet fall, they derive sufficient power for driving their saws, &c.

EAST PUTNEY, 12 miles from Brattleboro' and 116 from Burlington. A village about one-half mile from the station, on the Vermont Valley Railroad, containing about 175 inhabitants.

EAST SWANTON, 9 miles from St. Albans. A country station on the Branch road that runs from St. Johns, Canada, to St. Albans.

EAST WALLINGFORD, 39 miles from Bellows Falls, 13 from Rutland and 80 from Burlington; a station in the town of Wallingford, on the Rutland and Burlington Railroad. This town is watered by Otter creek, Mill river, and by three ponds, one of which, Hiram's pond, covering an area of 400 acres, lies on very elevated ground, and is one of the principal sources of Otter creek. The soil is generally good. The town was settled in 1773.

ESSEX JUNCTION, 28 miles from Montpelier, 8 from Burlington, and 24 from St. Albans; a village on the Vermont Central, containing 2 churches and about 300 inhabitants. A branch from Burlington, a part of the Vermont Central, connects at this place North and East.

FAIRFAX (AND GEORGIA), 10 miles from St. Albans, and 48 from Rouse's Point; a station on the Vermont Central Railroad. The village is situated about 4 miles east of the station, and contains 4 churches and about 1,000 inhabitants. The town of Fairfax was settled in 1783, and is watered by Parmelee and Stone's brooks, and Browe's and the Lamoille rivers. The land is generally level and of a good quality.

FAIRHAVEN, 15½ miles from Rutland and 7 from Whitehall. A village situated on elevated ground and on the Rensselaer and Saratoga Railroad, in the town of Fairhaven. The village contains six churches, one bank and about 2,000 inhabitants. The town was settled in 1779. The soil is generally productive. It is watered by Castleton and Poultney rivers. The former of which receives the waters of Lake Bomoseen, a large pond between Fairhaven and Castleton.

The Fairhaven Steam Slate Works, Allen & Leonard, proprietors. Commenced business in 1869, for the manufacture of billiard beds, table tops and other slate articles. Their works just below the depot consist of a main building 100x40, two stories and basement, with engine house attached, 24x40, one story. They employ 20 hands, turning out from 250 to 300 feet of finished slate per day.

Their machinery consists of 1 billiard planer, 1 rubbing bed, 1 band saw, 1 saw for sawing block, and 2 planers, driven by a 50-horse portable engine, made in Hoosick.

J. Davey, commenced business in 1864. About the year 1786, Matthew Lyon commenced the manufacture of iron nails, at works which are now situated in the rolling mill of where the depot now stands. In 1804, Jacob Davey succeeded to the business and continued until 1844, when his son, J. Davey, succeeded to the business, and has since very successfully carried it on. He occupies three buildings. His rolling mills, 60x90, one story, with machinery for rolling out various sizes of iron wire. The forge shop, properly the first building, is where the iron is smelted from the ore, 30x40, one story, and then taken to the rolling mills, thence to the nail shop, where it is made into different sizes of nails. This building is 20x40, one story. He employs 26 hands, and turns out between 200 and 300 tons nails per year, consuming 120,000 bushels of charcoal and 400 tons bituminous coal per annum. The motive power is furnished from 3 turbine wheels of 150-horse power combined.

L. & W. Miller commenced business in 1866, for the manufacture of No. 2 mill paper. The business was established by Matthew Lyon in 1800, who commenced in a very small way. The mill now runs four engines of 200 pounds each, and a 54 inch machine, turning out 250 pounds of paper per day. Employ 15 hands. Motive power furnished from a 50-horse power pitch back wheel. They use for heating and steaming the paper, a Harrison boiler.

FAIRLEE AND OXFORD, 22½ miles from White River Junction, and 154 from Boston; a station on the Connecticut and Passumpsic Rivers Railroad. The town of Fairlee is a rough and mountainous region with very little productive land, situated on the west side of the Connecticut river, and connected with Orford, N. H., by a bridge. The town was settled in 1766.

FERRISBURGH, 108½ miles from Bellows Falls, 244½ from Boston, and 19 from Burlington, a village and town on the Rutland & Bur-

lington Railroad. The village contains two churches and about 200 inhabitants. The town possesses a good soil and excellent water power by Otter, Little Otter, and Lewis creeks. Settled in 1784. A fine agricultural town, the soil is fertile and productive.

GASSETTS, 132 miles from Boston, 18 from Bellows Falls, and 34 from Rutland; a village in the town of Chester, on the Rutland and Burlington Railroad. The village is situated in a valley, and contains ten dwelling houses, a store, blacksmith's shop and depot building.

GEORGIA (AND FAIRFAX,) 10 miles from St. Albans, and 46 from Rouse's Point; a village and town, on the Vermont Central. The village is situated 3 miles from the station, and contains 2 churches and about 200 inhabitants. The town of Georgia was settled in 1784. The soil is various, but generally fertile. The village is pleasantly located, and commands some very pretty lake and mountain scenery, and wealthy farmers have made it very remunerative. The village is beautifully situated on elevated ground, 3 miles from the lake and 12 miles from Canada line. Large amount of butter, cheese and hay are annually sold here.

THOMAS GREENBANK, Graysville, established business in 1852. He occupies a building 85x50 feet, 6 stories in height, with an L 112x32 feet, 4 stories. Employs 85 hands, run 50 looms made by Davis & Furber, N. Andover, Mass.; 20 spinning jacks; 7 sets cards, and other machinery in proportion. Consumes 25,000 pounds raw material, and manufactures white and colored flannel, of which he produces about 810,000 yards per annum. The motive power to drive his machinery is furnished by a water wheel 3½ feet in diameter, of 100 horse power, made by John Tyler, West Lebanon, N. H. He also has a boiler for heating the mill, and for dyeing purposes, &c.

HARTLAND, 174 miles from Rouse's Point, and 9½ from White river junction. A village and town on the Connecticut River Railroad. This is a rich farming town, pleasantly diversified by hills and valleys, situated on the west bank of the Connecticut river.

C. C. WARREN & CO., tanners and curriers, established in 1855. They occupy a building 150 x 40 feet, employ 15 hands, and manufacture wax leather. A 20-horse power engine is used to drive the machinery.

HEALDSVILLE, 33 miles from Bellows Falls, 147 from Boston, 19 from Rutland, and 86 from Burlington. A small village on the Rutland and Burlington Railroad, in the town of Mount Holley.

HIGHGATE SPRINGS, 13 miles from St. Albans; a village on the road running from St. Johns to St Albans.

HOSTFORDS, 15 miles from Rutland, and 71 from Troy; a flag station on the Rutland and Washington division of the Rensselaer & Saratoga Railroad.

HYDEVILLE, 14 miles from Rutland, and 81½ from Albany. A village on the Rensselaer and Saratoga Railroad, containing about 500 inhabitants and one church.

WEST CASTLETON R. R. AND SLATE CO. This company was established in 1852, for the manufacture of marbleized slate mantels, billiard beds, table tops, &c. &c.

Their buildings comprise three factories, one of stone 265 x 54 feet, the other two of wood 200 x 60 and 60 x 30 feet, Blacksmiths' shop, 50 x 20 feet; store house, 70 x 24 feet, and 46 dwelling houses for the help, situated in West Castleton, nearly four miles from this (Hydeville) depot, on the Castleton river, on which they have a power equal to 175-horse, for driving machinery. Employ 175 hands, and produce about 2,000 mantels, 1,000 billiard beds, &c. &c., yearly.

JONESVILLE, 237 miles from Boston, 37 from St. Albans, and 13 from Essex Junction. The village contains about 100 inhabitants, and is located on the Vermont Central Railroad.

LUDLOW, 27 miles from Bellows' Falls, 247 from New York, and 141 from Boston; a village and town on the Rutland & Burlington Railroad. Black and Williams rivers give this town a good water power. The town was settled in 1784. It is mountainous, but contains good land for grazing. The village is pleasantly situated, and the centre of much trade with the surrounding country. The town contains 3 churches, 13 school houses, and one hotel. Population about 1,600. Amount of real estate $445,681; personal property, $172,969.

LUDLOW MACHINE WORKS, W. A. Patrick, Proprietor. Business established in 1854, by J. & W. A. Patrick. Occupies a one story building, 40x40, for a machine shop, situated on Black river; and a two story building, 75x50 feet, for a forge and machine shop, and pattern room, situated on a branch of the Black river. Employs 6 hands; manufactures wood working machinery for the manufacture of hand hay rakes. Also, lathes, for various kinds of wood turning, of which he makes a speciality; and does general jobbing. Does a business of $10,000 per annum. The power to drive his machinery is supplied by water, with wheels under 12 and 9 feet fall respectively.

LYNDON, 68 miles from White River Junction, and 34 northeast from Montpelier, across the country. A village and township on the Connecticut and Passumpsic Rivers Railroad. Lyndon is one of the best townships in the State; its surface is undulating, with a rich soil, free from stone, easy to cultivate, and very productive of wool, cattle, pork, butter and cheese. It is watered by the Passumpsic and some of its tributaries. Two important falls of that river are in this town; one of 65 feet fall in the distance of 30 rods, the other 18 feet. The village is very pleasant, and the seat of considerable business; the scenery is picturesque and interesting. Number of polls in the town in 1868, were 495. Rate of taxation, one per cent. Number of acres of land, six miles square, 23,040.

Valuation of real estate, $841,668. Population of the town estimated at 2,300. There are three villages in the town.

Lyndon, which contains two churches, (Cong. and Meth.) one hotel and the National Bank of Lyndon.

Lyndon Centre contains two churches, one hotel and one Town Hall.

Lyndonville contains one hotel. A village of about two years growth, and already numbers nearly 100 families. Churches and public buildings are in contemplation.

McINDOES FALLS, 48½ miles from White River Junction; a country station on the Connecticut and Passumpsic Rivers Railroad. Two churches. Population 600.

McLARENS, 53½ miles from White river junction. A country station on the Connecticut and Passumpsic Rivers Railroad. Population 700.

MANCHESTER, 30 miles from Rutland and 25 from Bennington. A village and town on the Rutland and Bennington Railroad. The village contains about 600 inhabitants, one church and one Bank. The town was settled in 1764, and watered by the Battenkill and its branches. The scenery is most beautiful, the town being situated between the Green Mountains and Equinox Mountain.

MIDDLEBURY, 85 miles from Bellows Falls, 180 from Boston, 37 from Rutland, 34 from Burlington, and 58 from St. Albans. A village and town on the Rutland & Burlington Railroad. The village is pleasantly situated on Otter creek. A small steamboat runs in the summer months on this creek, carrying passengers to Brandon. The village contains about 3,000 inhabitants, 4 churches, and 1 national bank. The Middlebury College, founded in 1800, and a Female Seminary, are located here. The town of Middlebury was settled in 1773, and in 1791 it became the shire town of the county. The surface is generally level; the soil is fertile. The town is watered by the Otter creek and Middlebury river. There are extensive works here for the quarrying of large quantities of white and variegated marble, with which the town abounds. Middlebury river rises in Hancock and falls into Otter creek at Middlebury. This mountain stream is about 14 miles in length, and affords a fine water power, and is very romantic. In its course it passes some romantic gorges along the carriage road from Windsor to Vergennes, and presents some delightful scenery.

Middlebury Cotton Co., George and Charles Everts and George and Henry Putnam, Proprietors. This firm commenced the manufacture of carpet warp in 1866. The business was established by a Mr. Marshall of Troy, N. Y., about 20 years ago. The main building is 180x50, 3½ stories; picker house 70x30, 2 stories, both built of stone. They employ 65 hands, run 2,000 spindles, turning out 500 pounds yarn per day. A turbine wheel, 90 horse, furnishes the motive power for the works.

The Middlebury Manufacturing Co. was incorporated in 1836, with a capital of $40,000. J. Davenport, President; Glover Severance, Agent and Treasurer; H. A. Sheldon, Secretary. Manufacturers of woolen goods. They employ 60 hands, running 3 sets of woolen machinery. Use about 1,000 pounds wool per week, turning out 180 yards per day. Their motive power is furnished by a 45 horse power turbine wheel.

The Champlain Marble Co., was organized about a year since by some of the Keith's men of Cheshire County, N. H., who made a purchase of a marble quarry and a water power located here, and are now engaged in the development of the same by opening the quarry and by the erection of a substantial mill 60x70 feet, and designed for sawing the marble into marketable dimensions. The water power included in their purchase affords a mill site contiguous to the quarry, which is connected therewith by a short railway of slightly descending grade, so that large blocks of marble may be lifted by the derricks direct from the ledge and deposited upon a car, which transports them to the sawing machines with a very small expenditure of power. The machinery for the mill was furnished from the machine works of Messrs. John Humphrey & Co., of Keene, and consists of eight gangs of saws, which embrace in their construction several new and important improvements,—designed by practical mechanics interested in the company,—which, it is anticipated, will not only add to the facilities of operation, but will materially increase their capacity of production. The opening of the quarry—which, in many instances, is a tedious and expensive job, on account of the large quantities of unsound and worthless stone which has to be removed before that of good quality can be reached—has in this case been very successful, and thus far has exceeded the most sanguine expectations of all concerned. Notwithstanding the short time since the commencement of the work, some very fine specimens of marble have been produced, which have been pronounced by good judges to be of a superior quality in soundness, color, fineness of texture, and freedom from foreign substances, rendering it susceptible of receiving a fine finish, and capable of enduring exposure to atmospheric changes, which will make it especially valuable for monumental and building purposes.

North Middlebury Marble Co. This company was organized and commenced business in 1868. Capital $50,000. This company quarried during the year 1868, 30,000 cubic feet. About a year ago they commenced to finish marble for the U. S. Post Office and Court House, at Portland, Maine. This branch of their works is situated in rear of the depot, where they get out monumental, head stones, &c. They have another shop situated about two and a half miles from the depot.

Employ about 137 hands, and do a business of about $80,000.

Addison County Marble Co. L. Moss Standish, President; William H. Rowland, Treasurer; Abraham Jackson, Secretary; A. J. Maxon, Sup't. Their quarry is in process of opening, which will be completed this season. They have already taken out 100 large blocks of marble, mostly white, or slightly veined, of a very fine quality, quite hard, and capable of taking a very fine polish. Employ 40 hands. They have one of Wardwell's and one of Hawe's steam stone cutting machines, both for channelling in the quarry, and have foundation laid for a large marble saw mill. Their production this season will not be less than 200 or 250 blocks. It is well adapted for ornamental and statuary purposes, as it can be cut into any desired shape.

Gleason & Lane, successors to C. E. Lewellen, occupy at East Middlebury, 2 two story buildings, one 84 x 30 feet, containing 40 saws and four machines; the other 56 x 25 feet, containing 18 saws and three machines, and an oil fire 36 feet, containing 12 tanks with a chimney 100 feet high. Have a kiln 16 feet long, 38 inches in diameter. Power supplied by two good water wheels. Employ 20 hands and produce about 10,000 bales per year.

MIDDLESEX, 222 miles from Boston and 76 from Rouse's Point. A village and town on the Vermont Central Railroad. The Winooski river runs just South of the village and waters the town of Middlesex. The soil along the streams is good, and that of the upland generally is adapted for grazing. It was settled in 1781. The village contains about 300 inhabitants and two churches.

MILTON, 248 miles from Boston and 56 from Rouse's Point. A village containing about 300 inhabitants, situated on the Vermont Central and on the Lamoille river. The soil of the town of Milton is generally good.

MONTPELIER, 218 miles from Boston and 58 from St. Albans, the capital of the State, among the mountains, in a valley on the Winooski river, and the North branch, the latter of which empties into the former a short distance below the depot. Montpelier contains about 3500 inhabitants, six churches and three National banks. Was settled in 1786 and became the seat of government in 1805 and the shire town of the county in 1811. The surface is very uneven and hilly. The soil is generally good. The *village*, though surrounded by hills, is of considerable elevation, and although it is too low to command an extensive prospect, is very pleasant and quite romantic in its appearance. East Montpelier was set off from the original town of Montpelier in 1850.

KEITH, PECK & CO. This firm commenced the manufacture of leather in 1844, and are the successors of one of the oldest establishments in this country, it having commenced in 1796, by E. Witherill, who continued until 1832, when Keith, French & Thurston succeeded him. In 1837, there was another change in the firm, Mr. French retiring, and they then took in Messrs. Peck & Bro., under the name of Keith, Thurston & Peck, and in 1844, Mr. Thurston withdrew from the firm, and the firm took the name of Keith, Peck & Co, and continued until 1857, when W. N. Peck engaged in agricultural pursuits, the firm continuing under the same name. Their works are situated on Main street, about one mile from the State house. They employ 8 hands and turn out 1,000 hides for harness leather, 1,000 boot and shoe leather, and from 400 to 800 sheep skins per year. They use about 500 cords of bark per annum. Their motive power is furnished from a 15-horse power engine, built by Tuft's of Boston, furnished with steam from one of his flue boilers.

PECK & JOHNONNETT's commenced business in 1863, for the manufacture of leather, on the Berlin side of the river. Employ 9 hands and turn out about 5,000 hides per year, using about 600 cords of hemlock bark.

They derive their motive power from a 20-horse power engine, furnished with steam from a flue boiler, made by Tuft's, of Boston. This firm have, in connection with their salesroom here, one in Burlington, Vt., above Central House.

D. TAFT & SON commenced the manufacture of flour in 1868. The business was established 36 years ago, by J. R. Langdon, with a capacity of 3 barrels of flour per day, of 24 hours.

Their works are situated on both sides of the Winooski river, part being in the town of Berlin. The flour mill is situated on the Berlin side, containing 5 run of burrs, with a capacity of 300 barrels of flour every 24 hours. They employ 44 hands in both mills, the North mill for custom work, with two run of burrs.

The flouring mill is driven by 5 turbine wheels of 200-horse power, and the custom mill by 1 turbine wheel of 80-horse power. Their office and salesroom is situated on Main street, just above State.

LANE, PITKINS & BROCK commenced business in 1865, for the manufacture of Lane's patent lever set circular saw mills, Jonval turbine and Rose water wheels, &c. The business was established in 1863, by Dennis Lane.

Their works are situated on Franklin street, north of Main street, and consists of foundry building, 28 x 40 feet, one story; machine shop, 28 x 100 feet, ell 34 x 58, two stories; pattern house, 26 x 36 feet, 1½ stories. These buildings are built of wood, and are situated on the left bank of the north branch of the Winooski river, whose waters furnish the motive power, by two of Lane's improved turbine wheels, three feet each under nine feet head. They employ 30 hands, using about 250 tons cast iron and 60 tons wrought iron and steel per annum. Manufacturing at present, about 80 circular saw mills, (D. Lane's patent,) and 50 patent set works for circular mills per annum, besides building a considerable number of water wheels, and doing general machinists' job work.

This firm have also a sash, blind and door manufactory, situated a few rods above on the same stream, where they employ ten hands, running two moulding machines, one tenoning machine, one foot morticing machine, one boring machine, one blind staple machine, one jig saw, five circular saws and tables, one patent borer, one turning lathe, one Daniel's and one Woodruff's planer. Motive power furnished from a three ft. turbine wheel, nine feet head. .

Their saw mill is also situated here, driven by a four ft. turbine wheel, nine feet head.

They cousume from six to eight millions feet of lumber per season.

SMITH, WHITCOMB & COOK were established in 1814, and have been in successful operation ever since, the present firm succeeding in 1868, Jan. 14th. The buildings consist of foundry, brick building, 50 x 60 feet; machine shop, 30 x 80 feet, two stories, also brick; grist mill, 50 x 55 feet three stories, brick; saw mill, 45 x 56 feet, two stories, wood, all substantially built with granite foundations and all nearly new.

They manufacture mill machinery and all kinds of iron work, together with feed, flour, &c. They employ about 20 persons, doing a business amounting to $30,000 per year. Their works are located on Onion river, with a fall of ten feet.

The above works are located five and a half miles from Montpelier, at Barre. A railroad is in course of agitation, designing to run from this place to Montpelier.

M. WRIGHT & SONS. The manufacture of wood working machinery was established in 1843, by M. Wright. They occupy a three story building, 36 x 80 feet, situated on the north branch of the Winooski river, on which they have a fall of 17 feet.

Employ 12 hands, making principally planing and matching machines, From a 60-horse water wheel they derive their motive power.

MONTPELIER JUNCTION, 217 miles from Boston, 57 from St. Albans, and 1 from Montpelier. A branch runs to Montpelier from here, connecting with trains on the Vermont Central three times daily.

D. TAFT & SON,

(Successors to J. R. Langdon,) Manufacturers of

BERLIN MILLS FLOUR,

Wholesale Dealers in

Flour, Corn and Rye Meal, Feed, Nails and Lime.

MAIN STREET,

Denison Taft, 1
John A. Taft, 1

MONTPELIER, VT.

Berlin Pastry. Berlin XX. Pacific XX Amber. Star XX Spring. Western.

MOUNT HOLLY, 37 miles from Bellows Falls, 93 from Fitchburg, and 15 from Rutland; a village situated a little off from the Rutland & Burlington Railroad, in a town by the same name. Settled in 1781. The surface of the town is elevated, and in some parts mountainous, but the soil is well adapted to grazing and produces many agricultural productions.

MT. TABOR AND DANBY, 18 miles from Rutland, and 37 from Bennington; a station on the Rutland & Bennington Railroad, in the town of Danby. The village of Danby is situated about half a mile from the depot, under the shadow of the mountains, and contains one church. The town of Danby is situated near the head waters of Otter creek, and was settled in 1768. The surface is rough and mountainous, but productive of extraordinary food for cattle.

NEWBURY, 35¾ miles from White River Junction, and 178¾ from Boston; a station and town on the Connecticut and Passumpsic Rivers Railroad. This is a beautiful town, on the West side of the Connecticut river, and supplied with mill privileges by Wells river and Harman's and Hill's brooks. The town is celebrated for its luxuriance and beauty, and for its agricultural productions. The village of Newbury is very pleasant, and is the home of many wealthy and educated people who patronize and appreciate the arts and sciences. This town was settled in 1764, and is connected with Haverhill, N. H., by two bridges.

NEW HAVEN, 207 miles from Boston; 93 from Bellows Falls and 26 from Burlington. A village and town on the Rutland and Burlington Railroad. The village contains about 125 inhabitants. The town is watered by Otter Creek, Middlebury river and Little Otter Creek. It was settled in 1769. The soil of the town is generally good.

NEWPORT, 105 miles north from White River Junction, 44¼ from St. Johnsbury; a station and town on the Connecticut and Passumpsic Rivers Railroad. This town is separated from Derby by Memphremagog lake, and is watered by a branch of the Missisquoi river.

Valley Field Mill is situated at West Derby, Vt., near Newport station. This mill is owned by M. J. Black of Baltimore, Maryland, and John Foster of this place, who has the management of the mill, a structure of 35x70 feet, with machine room 35x50 feet, for the manufacture of all kinds of wrapping papers, employing 8 hands and pushing about 1 000 pounds of paper daily. The mill is situated on Clyde river, half a mile from the outlet of Lake Memphremagog, and has 12 feet fall. Distance from Newport station one-half mile. Established in 1867.

NORTH BENNINGTON, 51 miles from Rutland, and 4 from Bennington. A village situated on a branch of the Walloomsac river and on the Bennington and Rutland Railroad. The village contains about 500 inhabitants and one church.

North Bennington Boot & Shoe Co., established in 1867. Occupy a three-story building and basement 40x84 feet, with a wing 40x55 feet, and manufacture sewed and pegged boots and shoes, giving employment to 125 persons, and doing business to the amount of $[illegible] per annum.

NORTH CLARENDON, 70 miles from Burlington and 6 from Rutland. A station on the Rutland and Burlington railroad, in the town of Clarendon.

NORTH DERBY, 110 miles from White River Junction; a station, in the town of Derby, at the northern terminus of Connecticut and Passumpsic Rivers Railroad. Settled in 1799. Clyde river, the outlet of Salem pond, affords it a good water power. The town is very pleasant, level and fertile.

NORTH DORSET, 22 miles from Rutland and 59 from Bennington. A country station on a branch of the Otter Creek and on the Rutland and Bennington railroad, in the town of Dorset. This town was first settled in 1766. Pawlet and Battenkill rivers rise in this town. The Otter creek passes through it. There are two mountains partly in this town, Dorset and Equinox.

NORTH FERRISBURGH, 52 miles from Rutland, and 15 from Burlington; a village of about 200 inhabitants, on the Rutland & Burlington Railroad, in the town of Ferrisburgh.

NORTHFIELD, 93 miles from Bellows' Falls, 41 from Burlington, and 197 from Boston, via. Lowell; a village and town on the Vermont Central. The village contains about 1,000 inhabitants, five churches, and one national bank. The town was settled in 1785. The principal stream in this town is Dog river, which runs through it in a northerly direction. The surface is uneven, but the soil is generally good, and easily cultivated.

Norwich University and Northfield Academy are located here. The library contains about 3,000 volumes, but they suffered about 4 years ago by being burnt out. They are making a new organization and expect many more. The number of students at present 12. During the war, they had over 100 students.

SALISBURY & Co. This firm was established in 1865, for the purpose of manufacturing domestic, regular and shaker flannels. They occupy a factory 40x70 feet, 3 stories high, with basement and attic; finishing house, 40x50 feet, 2 stories; storage, &c., 25x90 feet, 2 stories, and attic. They have 2 sets of machinery, 800 spindles, employ 25 hands, and produce 200,000 yards annually, valued at $75,000. Their machinery is propelled by water, using a 40 horse power "Russell's" turbine wheel, 3 feet in diameter, manufactured by P. Belknap & Co., of this place. Fall of water, 20 feet.

P. BELKNAP & Co. Business established in 1847. They manufacture clapboard machines, Russell & Blake water wheels, machinery for manufacturing Howe's patent wooden railroad chair, and general mill work. Also, manufacture Ely's superior patent set saw mills. They occupy a machine shop 170x33 feet. Furnace shop 90x30 feet. Employ 25 men, and produce from 25 to $30,000 worth machinery per annum. Their power is supplied by a 3 ft. turbine water wheel of 40 horse power, under a 20 ft. fall.

NORTH HARTLAND, 34 miles from Bellows Falls and 110 from Burlington. A flag station in the town of Hartland, on the Connecticut River Railroad.

NORTH POWNAL, 12 miles from North Adams and 39 from Troy. A village of about 100 inhabitants and one church, located in the town of Pownal, on the Troy and Boston Railroad.

PLUMKETT & BARBER MANUFACTURING CO., incorporated in 1866, with a capital of $100,000. William C. Plumkett, president; D. J. Barber, secretary and treasurer. The building is built of brick, 105 x 52 feet; wing, 150 x 34 feet, four stories, for the manufacture of print goods, 64x64. The company have already 104 looms, running 5,000 spindles, but capacity for 300 looms, and 14,000 spindles. At present they are employing 90 hands. Their motive power is derived from two turbine wheels of 200-horse power combined.

NORWICH, (AND **HANOVER,**) 4½ miles from White River Junction, 129 from Springfield, Mass., 267½ from New York 148¼ from Boston and 192 from Providence, R. I. This station is in the town of Norwich, for the accommodation of the above towns.

Norwich is connected with Hanover, N. H., by a bridge across the Connecticut. The surface is uneven, but the soil is good. Pomponoosuck river and other streams afford it good mill sites; settled in 1763. The village is pleasantly situated on a plain, and contains the Norwich University and a number of handsome buildings.

Hanover is situated on the opposite side of the river from Newport. In this town there is no river nor any considerable stream besides the Connecticut, the Mink, Slate and Goose Pond Brooks. There are several small islands in the Connecticut opposite Hanover; the largest of which is Parker's Island, containing 20 acres. The surface of Hanover is agreeably diversified with hills and valleys, and the greatest part is suitable for farms. There is less waste land in proportion in this town than in any town in Grafton county.

At this point is erected a splendid bridge, 400 feet in length, which connects the two flourishing villages on table land about 75 feet above the river.

Dartmouth College, (with about 400 students,) New Hampshire Medical College, the Chandler Scientific School and Agricultural College are located in this place, about half mile from the station, a great point of attraction for parties.

GEO. W. KIBBLING, Norwich, Vt. Business established in 1852. He occupies a main building, 40 x 60 feet, three stories, wing 20 x 40 feet, one story. Repair and blacksmiths' shop 20 x 40 feet; lumber shed, 120 x 20 feet; Kiln house, 12 x 20 feet, each one story. He manufactures about 1,000,000 feet of logs per year into lumber of various kinds. Uses 600 running cords of stones. Employs 10 hands; manufactures 60,000 pails. His machinery is driven by two Russell's turbine water wheels, three feet in diameter, (made by T. Belknap & Co., of Northfield, Vt.,) under 20 and 30 feet fall.

E. C. WADSWORTH, Norwich, Vt., commenced the tanning and currying business about four years ago; occupies a building 44 x 38 feet, two stories, of brick, with addition 60 x 40 feet, two stories, wood, making building 104 feet front and rear. Employs four hands and finishes 2,500 sides upper and harness leather and 3,000 calf skins per year. The business was established in 1843.

PASSUMPSIC, 58 miles from White River Junction, and 2⅜ miles from St. Johnsbury; a station on the Connecticut & Passumpsic Rivers Railroad. One church. Population 800.

E. T. & H. K. IDE commenced the manufacture of flour and feed, in 1866. They occupy a mill building 38x40 feet, 2 stories; and ware house 27 x 27, 2 stories. Employ four hands, and produce about 3,000 barrels flour yearly. They have 4 runs of burr stone, with all other machinery necessary for handling grain expeditiously, including horse power elevator in ware house. Their motive power is furnished from a water wheel, under 20 feet head. Their privilege is excellent, having sufficient water throughout the year to run ten times the amount of their machinery.

PAWLET, 29 miles from Rutland, and 57 from Troy, N. Y.; a village and town on the Rensselaer & Saratoga and Rutland & Washington Railroad. This town was first settled in 1761. The town is watered by Pawlet river, which falls into Champlain lake at Whitehall, and by Indian river. The soil of the town is warm and dry, and produces good crops.

PITTSFORD, 57½ miles from Burlington, and 9½ from Rutland; a village and town on the Rutland & Burlington Railroad. The inhabitants are chiefly engaged in the manufacture of leather, paper and quarrying. Otter creek meanders through the town. Fur-

[illegible] river affords the town good privileges. Settled in the year 1770.

PITTSFORD QUARRY CO. Established in 1866, for the manufacture of marble, which they sell either in blocks of any desired size, or saw to order. Main building is 100x75 feet; engine house 20x15, and derrick house 16x26. Blacksmith shop, 20x30. Employ from 50 to 75 hands, and can turn out 500 cubic feet of marble daily. Engine 60 horse power, made by Brown of Fitchburg, Mass. The quarry is situated one-quarter of a mile from the railroad station, and the facilities of shipping marble are unsurpassed. Parties desiring to visit the works will find at Pittsford Quarry station a gentleman connected with the company who will furnish information. Dealers who are acquainted with this marble, pronounce it the best [illegible] in the market, for monumental and building purposes.

POMPANOOSUC, 10½ miles from White River Junction, 143 from Springfield, Mass., 279 from New York, and 1[illegible]4 from Boston; a small country station on the Connecticut and Passumpsic Rivers Railroad, in the town of Norwich.

POULTNEY, 18 miles from Rutland, and [illegible] from Troy; a village and town on the Rutland & Washington Division of the Rensselaer & Saratoga Railroad. The village of Poultney is very pleasant,—the streets are wide and adorned with elegant residences. It contains 4 churches, 1 bank, and Ripley's Female College under the charge of Rev. John Newman. The population is about 2,000. The surface of the town is pleasantly diversified; the soil is warm and productive. Settled in 1771. Poultney river, rising in the highlands near Middletown and emptying into East bay, an arm of Champlain lake, is about 25 miles in length. This stream changed its course in 1783, by cutting a channel of 100 feet in depth through a ridge of land near the bay and destroying the navigation in the bay for a time by nearly filling it with earth. This obstruction has been removed.

WHITLOCK, ROSS, & SMITH. This firm commenced business 1868, for the manufacture of doors, sash and blinds. The business was established by [illegible] Bosworth, about forty years ago. Messrs. W., R. & S. occupy a building situated just below the depot, near the car track, 30x70, two stories, with engine house attached, 20x16, one story. Their machinery consists of such machines as are found in sash, door and blind manufactories, driven by a portable engine, 25 horse power, of Wood & Mann's make. They employ 12 hands, turning out 2 car loads per month.

EAGLE SLATE CO. Incorporated Nov. 15th, 1867. Organized in January, 1868. Capital, $100,000. Occupy from 20 to 40 acres of quarry land for the manufacture of roofing slates, in black, purple, green, gray and intermediate colors, of which they turn out about 15,000 squares per annum, ranging in size from 12 to 24 inches in length, and of various widths, employing from 75 to 100 hands. The railroad runs through the quarry land, and the railroad company have a special depot located there on the land of the company to receive their slate for transportation, and the cars when loaded are conveyed to any part of the country. Agency for the sale of slate and transaction of business is located at 41 Kilby street, Boston.

JOHN WILLIAMS commenced the manufacture of leather, (kip and calf,) about 40 years ago. He has now two employees. Situated at East Poultney, to be reached from this station.

POWNAL, 9 miles from North Adams, Mass., and 30 from Troy, N. Y. A village and town on the Troy and Boston Railroad. The village has three churches and about 200 inhabitants. The town of Pownal was first settled in 1761. The surface is broken and hilly, but the soil is strong and remarkably well adapted for grass. The town is watered by Hoosack and Walloomsac rivers.

HOOSACK VALLEY MILLS. S. Wright proprietor, Manufactures woolen cassimeres, occupying a three story mill building 90x30 feet; finishing, drying and dressing rooms in a building 25x42 feet, three stories; dyed houses 44x42, three stories. Mr. W. runs a six set mill, employs 175 hands; using 800 pounds wool per day, and turns out 15,000 yards per month. The motive power is furnished by two turbine wheels of 100 horse power. For heating, he has two tubular boilers, made by Campbell, Whittier & Co.

L. & A. LINCOLN commenced the making of all kinds of carriages and sleighs, in 1820. Employ 15 hands, and turn out 60 carriages and 25 sleighs per year. Their building is 100x30 feet, two stories.

PROCTORSVILLE, 138 miles from Boston, 24 from Bellows Falls, and 28 from Rutland; an enterprising village in the town of Cavendish, on the Rutland & Burlington Railroad, containing about 400 inhabitants, 2 churches, 1 hotel and a national bank. Property valued at $200,000. This is the native village of Ex-Governor Redfield Proctor, who resides here, as does Albert D. Hagar, State Geologist.

A. W. RICHARDSON. In 1830, Mr. Josiah Gilson established leather manufacturing, which has since 1857 been carried on by Mr. R. He has since rebuilt the building, making it 100x32 feet, 2 stories, situated about 15 rods from the station. Employs 6 hands, manufacturing sole, wax, belt, harness leather and calf skins. His machinery is driven by a breast wheel, under 14 feet fall.

PUTNEY, 9 miles from Brattleboro', 68 from Rutland, and 185 from Burlington. The village contains 2 churches, and 800 inhabitants, situated on the Vermont Valley Railroad, in a town of the same name. The town of Putney is finely located on the west side of the Connecticut river, and embraces a large tract of excellent land. Sacket's brook is a large and constant stream. It falls 150 feet in the course of 100 rods. The village of Putney is pleasant and bears the marks of taste and prosperity. The town was settled in 1744.

JOHN ROBERTSON occupies a building 80x70 feet, L 20x30 feet, for the manufacture of tissue and bleached manilla papers. Employs 15 hands, producing $100 worth per day. Runs a [illegible] cylinder machine, driven by water power and a 30 horse engine, made by Chadwick & Sons, Roxbury, Mass.

RANDOLPH, 176 miles from Boston, (via Lowell) being 10 miles less than via Bellows Falls, 72 from Burlington, 96 from St. Albans and 159 from Montreal; a village and town on the Vermont Central. The village contains about 800 inhabitants and 3 churches and is situated on the White river. This is an elevated township of good soil, particularly for grazing. It is well watered by branches of the White river. The town was settled in 1778.

RICHMOND, 240 miles from Boston, and 54 from St. Albans; a village and town on the Vermont Central Railroad. The village contains 300 inhabitants and one church. The town was settled in 1784, and is finely watered by the Onion and Huntington rivers.

ROCKINGHAM, 5 miles from Bellows Falls, and 114 from Burlington; a flag station on the Rutland & Burlington Railroad, in a town by the same name, beautifully situated on the west side of the Connecticut river. The surface of the town is uneven, but the soil is generally strong, warm and productive.

FARNSWORTH & Co., woolen manufacturers, established business in 1848. They occupy a building 32 x 96 feet, 2 stories, with basement and attic. Employ 35 hands, run 2 sets of machines and 16 looms, manufacture plain cassimeres, produce daily about 400 yards, and do a business amounting to $90,000 per annum. Power supplied by water.

ROXBURY, 8 miles from Braintree, 18 from Montpelier, and 192 from Boston; a village and town on the Vermont Central. The village contains about 250 inhabitants and one church. The town is elevated, between the waters of Onion and White rivers. Settled in 1789.

ROYALTON, 174 miles from Boston, and 124 from Rouse's Point; a village and town on the Vermont Central. The village contains about 300 inhabitants and 2 churches, situated in a valley on the banks of the White river. The surface of the town is somewhat rough and mountainous, but the soil is good, particularly on the banks of White river, by which it is watered. The town was settled in 1771.

RUPERT, 36 miles from Rutland, and 50 from Troy; a station on the Rensselaer & Saratoga Railroad, Rutland and Washington division. A part of this town is mountainous, but the soil is generally good for grazing. It is watered by the Pawlet river and a branch of the Battenkill.

RUTLAND, 166 miles from Boston, 182 from Providence, 52½ from Bellows Falls, 63 from Saratoga, 147 from Montpelier, and 234 from New York. The Rutland & Burlington; Western Vermont; Albany, Troy & Rutland Railroads centre here. This town was settled about the year 1770. The soil of the town is various, but generally of an excellent quality. Otter creek and its tributaries give the town a good water power. The village of Rutland is neat, well built, and handsomely located. It is the centre of trade for a large section of fertile country. The village contains 7 churches, 2 national and 1 savings bank. A new opera house and a new hotel were built in 1868. The population, which is increasing fast, is over 10,000.

THOMAS ROSS & Co. commenced business foot of West street, in 1869, for the manufacture of marble machinery, occupying a building 117 x 38, 2 stories. This building is filled with lathes, planers and machinists' tools. Foundry building attached, 40x70, 1 story; engine and boiler room in west end of main building or machine shop. They employ 75 hands, and receive power from a 40 horse power engine, built by themselves, furnished with steam from a tubular boiler, made by Thomas Sutherland, of Troy, N. Y.

MANSFIELD & STIMSON commenced business on Union st. in 1865, for the manufacture of machines; also, do general machinists' work. The business was established in 1854, by Bowman & Mansfield. Their foundry building, 60x60, 20 feet high, is where their castings are all made. Machine shop, 60x80, one story, is filled with heavy and light machinery. Office 22x50, 2 stories, used partly as store room for patterns. Pattern shop, 30 x 80, 1 story; forging shop, 35x35, 1 story, containing trip hammer, with necessary dies for making such drills as are used in the marble quarries. They employ 40 hands, and have turned out 65 tons iron castings per month, besides doing other jobs. Their motive power is derived from a portable engine of 40 horse power, made by Calvin Gray, of Boston.

THE RUTLAND MANUFACTURING CO. was incorporated in 1864, with a capital of $40,000. J. C. Dunn, President; G. C. Ruggles, Treasurer; L. Atwood, Agent; for the manufacture of chairs. Their works are situated at the railroad crossing, consisting of main building, 80x45, 3 stories, brick and stone, with saw mill 55 x 25, 2 stories, wood. Engine house, 25 x 20, 1 story, with room over boilers for drying. Storage and packing house 22x30, 3 stories; these three last named buildings are joined to main mill. They also occupy a 3 story building opposite main mill, 30x60, which is used for finishing chairs, bedsteads, &c., store house and office, besides, they have a 3 story house and yards for lumber. They employ 50 hands, and do a business of about $5,000 per month. Their motive power is furnished from a 60 horse power engine, with tubular boiler, made by the Putnam Machine Co., Fitchburg.

NORTH RUTLAND MARBLE CO. This company was incorporated in 1867, with a capital of $100,000. T. Gordon, President; George C. Hathaway, Treasurer. Their marble factory is situated half a mile below the depot, on the railroad running to Troy, Saratoga and Burlington, and consists of a one story brick building, 74 x 80. Their machinery consists of an engine of 80 horse power, made in Fitchburg by C. H. Brown & Co.; 2 tubular boilers, 50 horse power each, which furnishes the steam to heat the building and to drive the engine, running 8 patent gangs for sawing marble. They employ 70 hands; 20 here and 50 at their quarries, which are 5 miles from here, and one mile below Sutherland Falls, on the Rutland & Burlington Railroad.

LINCOLN IRON WORKS. This business was established by Thos. Ross, Esq., in Middlebury, Vt., in 1864, for the manufacture of mill machinery, marble quarrying machines, derricks, &c., and for general repairs. In 1866, Mr. C. H. Forbes, of Brandon, Vt., was taken in as partner, under the firm name of Thos. Ross & Co., and the business was moved to Rutland, Vt., where they erected a new machine shop of brick, two stories high, 116 x 40 feet, and a foundry 70 x 40 feet. They now manufacture all kinds of marble mill and quarrying machinery, steam engines, water wheels, shafting, pulleys, &c., &c. They employ from 40 to 50 hands. Their power is supplied by a 40-horse power upright engine, built by themselves. During the past year in Middlebury, the company have built three marble mills, one steam engine, three stone channelling machines and a variety of job work. They have in hand now four marble mills, three hoisting machines, and a large plate lathe, besides shafting and small machinery. This establishment is about 40 rods from the depot. At the foot of West street they have a side track, so that cars can be switched from the main track and all stock loaded or unloaded with dispatch.

RUTLAND STEAM WORKS, GEO. L. MOSHER, proprietor. In 1858 Mr. M. commenced the manufacture of bricks; his yard is situated about three-quarters of a mile below the depot. Employs 20 hands and produces nearly 2,000,000 bricks per year. Business amounting to $10,000.

A. F. DAVIS produces about 1,150,000 bricks per year, employing 18 hands.

RUTLAND MARBLE WORKS, W. N. OLIVER, proprietor, commenced business in May, 1868. Occupies a building 30 x 28 feet, two stories front and one story rear; located on Merchants row, opposite railroad depot. Manufactures every variety of marble and granite work for cemeteries; also marble furniture tops and mantels. Employs 20 hands; consumes $800 worth stock per month, and does a business of about $40,000 per annum.

To drive the machinery a steam engine of 20 horse power is used. This is the largest establishment for manufacturing marble work in Vermont, and the work has the reputation of being the best made in the State. Being near the celebrated Rutland quarries, the proprietor is enabled to select his materials personally, for each piece of work, thus obtaining a uniformity of color, sound and perfect in every respect.

RUTLAND BOOT AND SHOE CO., established Nov. 19, 1867. WM. D. GOSELAW, E. A. SADLER and R. F. LIVERMORE, directors. They occupy a four story building 30 x 60 feet; employ from 30 to 50 hands; manufacture men's, boys' and youths' calf and thick boots; produce from 75 to 100 pairs per day, and consume from $75,000 to $100,000 worth stock annually. No power is used, all goods being produced by hand.

RYEGATE, 133¾ miles from White River Junction and 48 E. by S. across the country from Montpelier, on the Connecticut and Passumpsic Rivers Railroad; a station in a town by the same name. This town is situated on the west bank of the Connecticut river, opposite Bath, N. H. Ryegate is watered by Wells river, some smaller streams and several ponds. The soil is generally rich, and very productive of all kinds of vegetables and grain. Settled by emigrants from Scotland, in 1774. Ryegate has a population (in 1863) of 1,038, and real estate to the value of $277,750. The grand list is one per cent on the valuation, and the taxes for the year 1868, amounted to $1.20 on the hundred. Number of churches, 3. Polls, 198.

ST. ALBANS, 249 miles from Boston, 337 from New York, and 64 from Montreal. The largest village in Northern Vermont, and on the Vermont Central. This road have erected large machine shops here, employing 100 hands. They have also both a new depot which adds much to the appearance of the place. The village contains about 3,000 inhabitants. The houses are neatly and elegantly built, with beautiful surroundings, many of them being the summer residences of New Yorkers and citizens of other cities. The hotels are large and convenient, the Welden House being the largest. The town was settled about the year 1785. The soil is fertile and under the most excellent of competent persons.

THE ST. ALBANS FOUNDRY CO., Incorporated 1848. G. G. & W. C. SMITH commenced the manufacture of all kinds of iron castings, such as car wheels, stove plates, sleigh shoes, &c., &c., and continued until 1861, when W. C. Smith succeeded to the business, and continued until 1869, when E. A. Smith and J. W. Newton became the proprietors, under the name of St. Albans Foundry Co. Their works are situated opposite the depot, fronting on Lake street, and contain principally of foundry and machine shops. They employ 60 hands, using about 7 tons iron per day, turning out 250 moving machines of "Buckeye" and from 4,000 to 5,000 car wheels. Their motive power is derived from a 25 horse power engine, built by the Putnam Machine Co., furnished with steam from one of that Co's tubular boilers.

ST. JOHNSBURY, 60¼ miles from White River Junction, 180¼ from Springfield, Mass., 424 from New York, 36 N. E. from Montpelier, across the country, and 59¼ from Boston, on the Connecticut and Passumpsic Rivers Railroad. The town was organized in 1789, the surface is rocky, but the soil is generally strong and fertile. The amount of available water power in St. Johnsbury is great and valuable. The Passumpsic river, which falls into the Connecticut river at the foot of 15 mile falls, passes through the central part of the town from north to south. Moose and Sleeper's rivers unite with the Passumpsic and afford a succession of excellent mill sites seldom seen so closely combined. There are three handsome villages in the town: St. Johnsbury Plain, St. Johnsbury Centre, and East St. Johnsbury. The Plain is the largest and contains 4 churches, First National Bank, with a capital of $150,000, and 1 carriage bank, 2 hotels and a public library, built in 1868-9, endowed by Gov. Fairbanks to the amount of $50,000. This with the County House, are the principal public buildings.

The town of St. Johnsbury contains 23,040 acres of land and real estate to the value of $1,017,670. The number of polls is 956, and the town tax is 70 cents, State tax 40 cents, and the school tax is 3 cents. It also contains 7 churches, 1 Congregational and 1 Methodist, and 4 hotels. The population is 1,496.

ELY BALCH & CO. occupy three main buildings, 120x22 feet and two stories high. The large shops, which is one story high, is 28x40 feet. Engine house is 30x32 feet and one story, and an office. The present firm commenced business in 1864, being successors of Ely & Wilder, who commenced in 1856, which was established by George W. Ely in 1848. They employ 30 persons and make 20 dozen lines and the same number of forks per day. They use 30 tons of steel yearly, and have a capital of $100,000. One interest power engine, Geo. W. Davis & Co.'s make, Nashua, N. H. supplies the power. A portable (E. S.) about 40 horse power also assists.

ST. JOHNSBURY SCALE WORKS. We think but few of our readers have any adequate idea of the extent of the business of manufactories under the ambitious appellation of this town; by Messrs. E. & T. Fairbanks & Co. Our readers will perhaps have a better understanding of the magnitude of their business if we give a few figures. They employ in their establishments 475 men, and the monthly pay roll amounts to over $30,000. Besides the four or five immediately in the village, a large number of men are employed at their branch houses in the principal cities of the Union, and about the country in selling and setting up scales—as far as Texas and Kansas—over 100 men.

The freight delivered to, and removed from, the shipping is over 10,000 tons per year. 1,200 tons Lehigh and Cumberland coal, 20,000 bushels of charcoal, 40 tons of cast steel, 30 tons of copper, 1,000,000 feet of lumber, are yearly consumed. Also, pig iron and bar iron in large quantities; 9,000 gross of screws, 500 dozen files, &c., &c., and we might mention many more items of interest, but the above will suffice.

In the work they packed for shipment are portable platform scales, and 100 face scales, besides a large number of

smaller scales. Their weekly product varies from 800 to 1,000 scales. When we consider that a village usually requires, for its business, but one hay scale, we are led to inquire, "where do all these scales go," and "how soon will the world be supplied?"

From the first of May, 1868, to Jan., 1869, they manufactured (only "to order") 110 railroad depot and track scales, with platforms varying from 12 to 112 feet in length, and if built in one continuous platform it would extend nearly three-quarters of a mile.

Their foundry is one of the largest in New England. It has all the modern improvements in the way of machinery. It has three large cupolas and the melted iron is running from one or another nearly all day. Eighteen tons of iron are melted each day and poured into the moulds for scale castings exclusively.

The whole establishment is a marvel for order and system. Each department is under a foreman, separate from every other, while these foremen report to others, who see that the work is transferred from one department to another, as it progresses in finishing, so that there is no delay or confusion in advancing the work in its different stages, from the raw material to the finished scale; and all is under the immediate supervision of the partners of the house.

Besides an increasing demand and sale in all parts of the United States, their orders for shipment to foreign countries, (South America, Russia, the German States, Japan, China, &c.,) are steadily increasing. These scales are adapted to the standards of the countries where they are to be used—Chinese characters being used for figures in scales shipped to China, and the Turkish characters for the Turkish Empire, Persia, &c. In short there is scarcely a civilized country the world over, where the Fairbanks scales have not been introduced.

D. F. Rollins established business, February 13th, 1858. He occupies a three-story main building, 55x30 feet, and blacksmith shop, 25x35 feet. He employs 7 hands, manufactures about 30 horse powers, 20 separators, and 40 drag saw machines, 10 circular saw machines per annum, and also builds other machines driven by horse power. Consumes $5,000 worth stock and does business of about $11,000 per annum.

ST. JOHNSBURY CENTRE, 63½ miles from White River Junction and 2¾ from St. Johnsbury, a small village in the town of St. Johnsbury, on the Connecticut and Passumpsic Rivers Railroad. (See St. Johnsbury.)

SALISBURY, 40¾ miles from Burlington and 79 from Bellows Falls, a village and town on the Rutland and Burlington Railroad. The village contains about 400 inhabitants. The soil of this town is generally good; it contains some rough land and some excellent meadows; it is watered by the Otter creek, Middlebury and Leicester rivers. The latter is the outlet of Lake Dunmore, a fine sheet of water four miles in length and three-fourths of a mile in width. This lake lies in Leicester and Salisbury.

SHAFTSBURY, 11 miles from Bennington, and 44 from Rutland; a flag station on the Rutland & Bennington Railroad, in the town of Shaftsbury. This town lies between the Battenkill and Walloomsac rivers, and gives to them some tributaries. The town was first settled in 1763. Although the surface of Shaftsbury is elevated, the soil is generally of an excellent quality.

SHARON, 48 miles from Bellows Falls, and 51 from Montpelier; a village containing 200 inhabitants, and one church, in a town by the same name, situated on the Vermont Valley Railroad. The White river passes through the town. The surface is broken, but the soil is warm and productive. Settled in 1763.

SHELBURN, 6½ miles from Burlington and 113 from Bellows Falls, a station and town on the Rutland and Burlington Railroad. This town is finely watered by Platt river, a pond covering 600 acres and by the waters of the lake. The soil of the town is strong, fertile and well improved.

SOUTH BARTON. The village of South Barton is situated 85 miles north of White River Junction, 5 miles south of Barton station, and 25 miles south of the Canada line, in the town of Barton. It sprung into existence on the arrival of the Passumpsic River Railroad, in 1857. It is only 2 miles north of the water shed that divides the waters of the Passumpsic and the St. Lawrence rivers. There is an abundant supply of timber, and it is one of the most important wood stations on the Passumpsic River Railroad. A post office was established here in 1861. There are 5 saw mills, 2 stores, 1 blacksmith shop; also, 2 large brick kilns, used for burning coal, producing some 100,000 bushels coal per year.

M. F. Blake, of this place, is the proprietor of and runs 3 saw mills, in size as follows: 1 two-story 48x66, one 28 x85, and one 32x50. Manufactures boards, clapboards and shingles, laths, &c. He employs from 12 to 20 hands, runs 3 circular board machines, 1 clapboard and 2 shingle machines, 1 Daniels & Woodworth's planer, 1 lathe for wood and 1 for iron; does a business of from $20,000 to $30,000 per annum. The mills are all run by water power. In the first mentioned, a Russell's new turbine wheel, under 30 feet fall, supplies the power. In the second, a 16 ft. overshot wheel; and in the third, a turbine wheel, under a fall of 15 feet, manufactured by J. H. Paddock, of St. Johnsbury.

The Orleans and Caledonian Steam Mill Co. was established here in 1867. M. F. Blake, President. They occupy a mill 2 stories in height, 137x32 feet, with a wing 32x35; and engine house 12 x 24 feet. Employ 40 hands, manufacture clapboards, shingles, laths, &c. The machines used are as follows: 1 board saw, capable of cutting 20 to 25 thousand feet per day; 1 shingle and 1 lath saw, and one improved cut-off saw, for squaring dimension lumber, &c.; consume about 2,000,000 feet per annum, and do a business of $30,000. They have a track connected with the Passumpsic Railroad, that runs into the mill, for transporting purposes. They also have connected with the establishment a boarding house, 32 x 70, 3 stories, and two large barns. A 40 horse power steam engine, made by J. C. Hoadley, Lawrence, Mass., is used to drive their machinery. This company have also a box manufactory located at Barton Landing, where they employ 5 hands, and make all kinds of packing boxes, at the rate of about $1,000 worth per month. The building is 40x45 feet, 2 stories in height, with basement, used for making starch. The machinery is driven by water power, with wheel under 14 feet fall.

SOUTH SHAFTSBURY, 49 miles from Rutland and 6 from Bennington, a village in the town of Shaftsbury, on the Rutland and Bennington Railroad. It contains about 1,000 inhabitants and 1 church.

SOUTH ROYALTON, 18 miles from White River Junction and 44 from Montpelier. A village containing 150 inhabitants and one church, situated in the town of Royalton on the Vermont Central.

SOUTH VERNON, 11 miles from Grout's Corner, (now Miller's Falls,) 111 from New London and 114 from Boston. The junction of the Connecticut River Railroad, the Brattleboro Branch of the Vermont and Massachusetts Railroad and the Ashuelot Railroad, near the lines that separate Massachusetts, Vermont and New Hampshire.

SOUTH WALLINGFORD, 13 miles from Rutland and 42 from Bennington. A village in the town of Wallingford, on the Rutland and Bennington Railroad, containing one church and about 300 inhabitants.

SUMMIT, 34 miles from Bellows Falls and 18 from Rutland, a station in the town of Mount Holly, at the top of the grades which has a steady rise from Rutland and downward to Ludlow. The trains rise very slowly up this grade, making up for lost time in the descent.

SUNDERLAND, 36 miles from Rutland and 19 from Bennington. A small village containing about 100 inhabitants and one church, situated in a town by the same name, on the Rutland and Bennington Railroad. This town was first settled in 1765, and is watered by several ponds, Battenkill river and Roaring brook.

Bacon & King commenced business in 1864, for the manufacture of shoe pegs and clothes pins. They employ 16 hands, and produce 50 bushels per day. Have an engine of 12-horse power, made by Starbuck, Bros., Troy, N. Y., for driving their machinery, also have a 12-horse water power.

Gregory & Williams. This firm commenced business in 1866, manufacturing clothes pins, pails, stove pokers, &c. The business was established in 1857. Messrs. G. & W. occupy a building 30x20 feet, L, 18x18 feet, employing six hands and doing a business of $[illegible] a year. The power is furnished from a 12-horse power turbine wheel.

SUTHERLAND FALLS, 6 miles from Rutland, 58 from Bellows Falls and 31 from Burlington, a station in the town of Rutland, on the Rutland and Burlington Railroad. The inhabitants are mostly engaged in the quarrying of marble. The village contains about 300 inhabitants.

Marble & King commenced the manufacture of Pierce's patent clothes pins in 1865. They occupy a building 34x24 feet, employ 3 hands and produce about 100,000 dozen per year. The motive power is furnished from an 18-horse Phillips iron turbine wheel.

SWANTON, 284½ miles from Boston, 10 from St. Albans and 14 from Rouse's Point. A village and town on the Ogdensburg and St. Albans Railroad, and bordering on Lake Champlain. The village contains 4 churches, 1 national bank and about 200 inhabitants. The town was settled in 1787. Missisquoi river passes through the town. That river is navigable for Lake vessels to Swanton Falls, six miles from the mouth. The surface and soil of the town is favorable to agricultural pursuits.

Edwin S. Mead commenced the manufacture of woolen goods as successor of James Platt, who established the business in 1840. His mill is situated between the stations on the Vermont and Canada and Montreal and Vermont Junction Railways, and does a business of about $25,000 per year. His motive power is furnished from a 40-horse Johnson wheel.

S. F. Blackman commenced business in 1865, and manufactures doors, sash and blinds, window frames, mouldings, &c., employing from 4 to 7 persons, and consuming annually about 125,000 feet of lumber. He occupies a two-story building, 50x75 feet, situated about a quarter of a mile from the railroad station, on the line of the Vermont Central and Vermont and Canada Railroad. A 15-horse power iron reaction water wheel furnishes the motive power.

THETFORD & LYME, 15 miles from White River Junction and 149 from Springfield, Mass. A station and town on the Connecticut and Passumpsic Rivers Railroad. The town was first settled in 1761. It is pleasantly situated on the West side of the Connecticut river opposite Lyme, New Hampshire. The Ompompanoosuc and its branches give the town an excellent water power. There are several ponds in Thetford, one of which is worthy of [illegible]. It covers about nine acres, and is situated on an elevation, the base of which is only 4 rods from the Connecticut river and 100 feet in height. It is very deep, has neither inlet or outlet, and contains large quantities of perch and other fish. The surface of the town is generally rocky and uneven, but the soil is strong and productive.

VERGENNES, 98 miles from Bellows Falls and 21 from Burlington, a city on the Rutland and Burlington Railroad, situated on high grounds and commanding a fine view of the surrounding country. It contains 5 churches and 1 bank, and was settled in 1766. The territory, which comprises an area of 4800,400 rods, was invested with city privileges in 1788. Otter creek at this place is 500 feet wide, and at the falls is separated by two islands, which form three distinct falls, of 37 feet. The creek or river between the city and the lake, which is seven miles distant, is crooked, but navigable for the largest lake vessels.

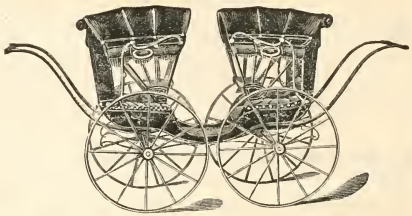
VERNON, 16 miles from Grout's Corner, (now Miller's Falls,) 116 from New London and 5 from Brattleboro. A station and town in Windham county, on the Brattleboro branch of the Vermont and Massachusetts Railroad. The town of Vernon lies on the West side of the Connecticut river, opposite to Windham, New Hampshire. The river bends abruptly at this place, but in consequence of its elevated and rocky shore, affords this town but little intervals land. The surface is generally mountainous, rocky and unproductive.

WALLINGFORD, 9 miles from Rutland and 46 from Bennington, a village and town on the Rutland and Bennington Railroad, and on the Otter creek. The Rutland and Burlington Railroad also runs through this town. (See East Wallingford.)

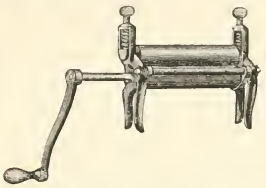
COLBY BROTHERS & CO.,

WATERBURY, VERMONT,

MANUFACTURERS OF



CHILDREN'S CARRIAGES,



CLOTHES WRINGERS,

Willow Ware, Velocipedes, &c.

***Salesroom*, 508 *Broadway*, *New York*,**

OPPOSITE ST. NICHOLAS HOTEL.

SMITH, MOORE & CO., Agents.

WATERBURY, 227 miles from Boston and 47 from St. Albans. A village and town on the Vermont Central Railroad. The village is situated in a valley between the mountains and forms a delightful summer resort, many persons visiting here during the summer months. Tourists leave the cars here for Mt. Mansfield or Camel Hump. The former is 4,359 feet and the latter 4,188 feet high. The village contains 600 inhabitants and 3 churches. The surface of the town is generally level. The soil is warm and fertile, and is not excelled in richness by any in the State. Settled in 1784.

Colby Bros. & Co., manufacturers of children's carriages and velocipedes, and Colby's patent family wringing machine, are a good example of what can be done by persistent effort and enterprise, with very little capital and encouragement. In 1856, the two elder brothers came from Bolton, and purchased about 30 acres of land, on which was situated a machine shop. They were then young men or boys, 21 and 23 years old, had been raised on a farm and knew no other trade or business. They peeled their first crop of willows in the Spring of 1857, and soon after commenced custom machine work and building machines for peeling willows. The next year thinking a part of the willows might be worked up here to advantage, they procured a first-class willow worker, Mr. Landt, (who is now with them and a stockholder,) and commenced making cabs, the wheels and gearing of which they purchased in Massachusetts. Finding a ready sale for the cabs, they very soon decided it would not do to go to Massachusetts for wheels, and employed a good mechanic, buying some machines and making more. They were soon turning out wheels for their own cabs and large numbers for sale besides. In 1860, the name was changed to Howden, Colby & Co., and capital increased by admitting other partners, to $11,000.

In 1860 they commenced building clothes wringers, being among the first who offered this great labor and clothes saving machine, and the very first who made them with a galvanized iron frame. In 1864 other members were admitted to the firm, and capital increased to $28,000, and name changed to Colby Bros. & Co., which continued till 1865, when a joint stock company was formed, with no change of name, but an increase of capital to $75,000; present capital $100,000. George J. Colby President, Jesse J. Colby Treasurer. They have some fifteen buildings occupied for business, the whole embracing about 40,000 square feet. In addition, the company have built and purchased some dozen houses for dwellings. The number of hands employed by this company are from 60 to 100, who receive monthly, between $2,000 and $3,000 wages. Among the items of raw material worked up annually, are 300,000 feet of hard and soft wood lumber, 15 tons of peeled willow, over 50 tons of iron and steel, and about 10,000 yards of enameled cloth. Their sales from December 1st, 1863, to June 30th, 1867, amounted to over $320,000, and the amount paid for labor during the same time was $96,387.62. They produce 50 carriages per day, or about 15,000 per year, and will soon be turning out as many more velocipedes for boys, worth from $15 to $25. They done a business in 1868, amounting to nearly $200,000. The water power used in driving their machinery, amounts to 100 horse. They claim to be ahead of any other manufacturing concern in the world for style and quality of goods, making over 150 styles of carriages. A gold medal was awarded them by the New Hampshire Mechanics and Art Association in 1868, for children's carriages, and a silver medal at the same time for excellence in clothes wringers. The above is a faint idea of

C. E. ABBOTT & CO.,

MANUFACTURERS OF

DOORS, SASHES AND BLINDS,

ORDERS SOLICITED. ***WEST RANDOLPH, VT.***

what has been accomplished from very small beginnings, grappling with the obstacles to be overcome, rejecting with a practical eye all utopian schemes, attending to business and dismantling their own notes, they are now able to carry on successfully, in connection with their manufactory here, a large warehouse at 308 Broadway, New York, opposite St. Nicholas Hotel, where are found all the different styles of goods which they manufacture.

WEST ALBURGH, 287½ miles from Boston, and 23 from St. Albans, a station in the town of Alburgh, on the Ogdensburgh & St. Albans Railroad.

WEST BURKE, 77 miles from White River Junction, and 15¼ from St. Johnsbury, a small village on the Connecticut & Passumpsic Rivers Railroad, in the town of Burke. Population 1,300. The town of Burke is divided from Victory on the East, by a mountain 3,500 feet in height. The soil of the town is good, and abounds with hard wood and evergreens. It is watered by branches of the Passumpsic. Settled in 1780.

WEST HARTFORD, 161 miles from Boston and 57 from Montpelier, a station in the town of Hartford, on the Vermont Central Railroad.

WESTMINSTER, 20 miles from Brattleboro' and 124 from Burlington, a village and town on the Vermont Valley Railroad. This town lies on the range of high lands, which separate the waters of the Connecticut and Merrimac. From the village a prospect is presented of lake and mountain scenery, with all the varied scenery which renders New England peculiarly delightful. Several streams rising from large ponds in this town and its neighborhood, produce a considerable water power, which is improved for manufacture of various kinds. The village contains 400 inhabitants and two churches.

WEST RANDOLPH, not a station. A post village in the town of Randolph, to be reached from Randolph station, on the Vermont Central.

C. E. ABBOTT & CO. commenced the manufacture of doors, sashes and blinds, in 1866. They occupy two buildings, 40x90 and 16x30 respectively. Employs from 25 to 30 hands, producing from 50 to 75 doors, sashes and blinds daily, doing a business of $[illegible] annually. A 25-horse power engine supplies the power, made by S. E. Caldwell & Son, of Boston.

WEST RUPERT, 38 miles from Rutland, and 40 from Troy, N. Y., a country station in the town of Rupert, on the Rensselaer & Saratoga Railroad, Rutland & Washington Division.

WEST RUPERT DAIRY ASSOCIATION. This association was formed for the manufacture of cheese, and have about $4,000 invested. They employ from 4 to 6 persons, consuming the milk of from 150 to 400 cows, and produce from 100,000 to 150,000 lbs. cheese yearly. T. L. Sheldon, Sec'y.

WEST RUTLAND (and CLARENDON SPRINGS), 4 miles from Rutland, 32 from Troy and 22 from Castleton, a village in the town of Rutland, on the Rensselaer and Saratoga Railroad. It contains about 600 inhabitants and 2 churches.

RUTLAND MARBLE COMPANY. The old company was organized under the same name in 1854. The present company was organized in 1862. They employ 300 men, running steam and water mills, with 8 and 12 gangs of saws, for the manufacture of block and sawed marble, turning out 150,000 cubic feet yearly. Have a 70-horse power engine, built by Brown & Co., of Fitchburg, Mass. Have for driving other machines, 7 engines of 4 and 6-horse power, and 180 stationary cows of 20 and 6-horse power. They do a business of over half a million annually.

SALISBURY & COMPANY. This firm was established April 1st, 1863, for the manufacture of hard-wood bedsteads and soft-wood furniture. Their factory has a front of 100 feet, engine room 24 feet, and a saw mill 20 feet, (which is run in connection with the other business,) the whole making a front of 144 feet on the railroad. The factory and engine room is 40 and 60 feet wide, and saw mill, 70 feet deep; all two stories high, with basement and attic. Their saw mill, carriage and cost works were made by P. Belknap & Co., of Northfield, Vt., Ely's patent. Have an engine of 60-horse power, made by G. W. Davis & Co., of Nashua, N. H. Employ 30 hands and calculate to use 1,000,000 feet of lumber per annum.

WHITE RIVER JUNCTION, 119 miles from North Derby, 165½ from Rouse's Point, 124½ from Springfield, Mass., 250 from New York, 144 from Boston and 187½ from Providence, R. I. The Northern, Vermont Central and the Connecticut and Passumpsic Rivers Railroads centre here. It is situated on the town of Hartford, Vt. This town is on the West side of the Connecticut and is otherwise finely watered by White and Waterquechy rivers. The surface of the town is uneven, but the soil is rich, warm and very productive. It contains 25,280½ acres of land and real estate to the value of $[illegible]. The number of polls (1859) is 547, and the rate of taxation is one per cent of property. The population of the town in 1860, was 2996, but up to the present time it was increased to 2572.

FRENCH, WATSON & CO., manufacture hay and manure forks. They occupy a building, 40x100 feet, situated one mile from White River Junction, on the line of the Vermont Central and Woodstock Railroads. They employ from 20 to 30 hands. These works are driven by water power. The business was established in 1865 by French, Van Ormen & Co.

WHITE RIVER VILLAGE, 155 miles from Boston, and 63 from Montpelier, a village on the Vermont Central Railroad, in the town of Hartford, contains about 300 inhabitants and two churches. Situated at Quechee near the above station is the firm of

A. G. DEWEY & Co., who established business in 1814. They occupy a two story mill 44 x 80 feet, with basement and attic, dye house and office, 30 x 88 feet, with boarding house, store house, four tenements and suitable outbuildings. They employ 50 hands and manufacture satinets and horse blankets, producing about 600 yards satinets per day, 13 ounces per yard finished, and do a business of about $100,000 per annum; run three sets machinery, 36 inch finishers. Power supplied by a 4½ feet Hathaway water wheel, under 18 feet fall. Their agents in New York and Boston are Mackinstosh, Green & Horton. The first shoddy made in America was pulled at Quechee in 1840, with a machine invented by Reuben Daniels, of Woodstock, Vt., which is now discarded and the English picker is in general use. In 1846 Mr. Dewey worked all the soft woolens that were collected in New England, New York and Philadelphia.

I. N. GILLETT occupies a main building, 24x60 feet, with ell 24x24 feet, situated in the town of Hartford, near the above station, for the manufacture of straw paper boards. The business was commenced in 1868. He now employs 6 hands, turning out from 1,000 to 1,200 pounds per day. His machinery, consisting of 2 beating and grinding engines, finishing machines, &c., is driven by water power.

WHITING, 74 miles from Bellows Falls, and 45 from Burlington; a village and town on the Rutland & Burlington Railroad. The village is situated on Otter creek, about half a mile from the depot, and contains about 200 inhabitants and 1 church. This is a fine farming town; was settled in 1772, and named in honor of John Whiting, of Wrentham, Mass.

WILLISTON, 246 miles from Boston, and 28 from St. Albans; a village and town on the Vermont Central Railroad. The village is situated on the Winooski river, and contains about 200 inhabitants. The town is an excellent farming district, of a rich soil, with an uneven surface, but not mountainous. It is watered by the Winooski river, and some smaller streams.

WINDSOR, 110 miles from Springfield, 245 from New York, and 134 from St. Albans; a village and town on the Connecticut River Railroad. This town was first settled in 1764. Its surface is uneven, but there are but few parts of it unfit for cultivation. It contains large tracts of fertile meadows and uplands. Mill brook waters the southern part of the town. It is situated on the west bank of the Connecticut. The State Prison is located here. The village contains four churches, 1 national and 1 savings bank, and a population of about 2500.

FRANCIS DRAPER commenced manufacturing all kinds of castings in 1860, doing all the casting for the Windsor Manufacturing Co. His foundry is situated on Main street, below the bridge, and is a building 60x80 feet, 1 story, with a ware house 60x30 feet, 2 stories, and wheel house attached to foundry 24 x 30 feet, containing a 24-inch Tyler wheel, under 20 feet fall, which furnishes the motive power. He employs 10 hands and consumes about 200 tons of iron yearly.

THE WINDSOR MANUFACTURING COMPANY manufacture machinists' tools, machinery for guns, pistols, stone channelling, and dressing machines, &c. &c. In 1858, E. G. Lamson bought the armory at this place, and immediately commenced the manufacture of guns for this government, turning out during the rebellion 75,000 arms. The guns made were Ball's patent repeating and single loading carbine. They also manufactured machinery for the United States government and private armories, throughout the country. Since the close of the war they have turned their attention to the manufacture of machinists' tools, cutlery tools; also, Lamson's patent channeling machine, for quarrying marble and other building stone. This machine has lately been invented and introduced into the market, and has proved very successful, having been thoroughly tested in this State, which is so rich in its fine marble, &c. Case's diamond patented rock drills are also made here; also, Pomeroy's patent combination screw and griping wrenches.

The buildings occupied by this company, "some fifteen in number," are situated on both sides of the Mill brook, a stream which rises in the mountains on the west and flowing nearly easterly emptying into the Connecticut river. From several large turbine wheels they receive their motive power, except in the dryest seasons, when their power is supplied from a large steam engine. Have shop room for over 400 men, and unexcelled facilities for turning out machinery of all kinds.

The company has a capital stock of $275,000. E. G. Lamson, (President of Lamson & Goodnow Manufacturing Company, at Shelburne Falls, Mass.,) president; E. E. Lamson, treasurer; R. H. Lamson, superintendent at works.

WINOOSKI, 3 miles from Burlington, 161 from Ogdensburg and 70 from Rutland. A village on Winooski river, and on the branch of the Vermont Central, running from Burlington to Essex Junction. It is one of the most enterprising villages on the west side of the mountains.

Winooski contains two churches, and about 2,500 inhabitants. About half a mile above the depot is one of the most picturesque sights to be seen in New England. The Winooski river, winding round through the lime rocks 150 feet below the surface, presents a rare picture; just above is an extended vale of meadow land, which is supposed to have been once the bed of an extensive lake.

BURLINGTON WOOLEN CO. This company was incorporated in 1862, with a capital of $200,000. E. R. Mudge, president, Joseph Stedson, treasurer and F. C. Kennedy, agent.

This is one of the largest woolen mills in the State of Vermont.

The mills and other buildings, with yard room, cover about 20 acres of ground, situated on the right bank of the Winooski river, within a quarter of a mile of the depot.

The names and dimensions of the different buildings, are as follows:

No. 1, main mill is 150x46, seven stories and attic: No. 2, dye house building, 94x46, part one and four stories: No. 3, dresser room building, 29x41, three stories and basement, the latter building connected to main mill by dye house: No. 4, machine shop, 139x29, one story and basement: No. 5, small mill, 150x44, two stories and basement, containing 7 sets of machinery: No. 5, coal house, with capacity for storing 2,000 tons of coal. No. 6, wool store houses, 80x40, and 90x80, two stories each, capacity for storing 800,000 lbs. of wool: No. 7, miscellaneous store house, 80x45, one-story: No. 8, office building, 67x20, two stories. The buildings are constructed mostly of brick.

They run 22 sets woolen cards, 10,000 spindles, employing 550 hands, consuming about 4,000 pounds fleece wool in the grease per day, and producing 62,000 yards ¾ 11 oz Moscow beavers and black doeskins per [illegible]. The motive power is derived from 2 Tyler wheels, of 240 horse power, and 2 Leffel wheels of 325 horse power. They also have, in case of necessity, a 275 horse power engine, built by the Providence Steam Engine Co., of Providence, R. I., furnished with steam from 5 tubular boilers, built by the Swamscot Machine Co., of South Newmarket, N. H. These boilers also furnish steam for heating the several buildings, including dye house. This company manufacture altogether Moscow beavers and black doeskins, using none but fine wools. The business was established in 1835, by the Burlington Mill Company, and continued by them until 1862, after which time it has been conducted by the present company.

Edward Stevens & Co. About twenty-four years ago Edwards & White commenced the manufacture of machinery in a small way, and continued together, the business increasing until 1857, when Mr. White retired, and Mr. Edwards formed a partnership with Mr. Stevens, under the name of Edwards & Stevens, and in 1867 they took one or two gentlemen into the firm with them, under the name of Edwards, Stevens & Co., manufacturing machinists' tools, planing machines, &c., &c. They occupy four or five buildings, the principal being their machine shop, which is situated on Canal street, a one story, brick building, 200 x 40, with two ells, 160 x 122 and 124 x 40, one story each. Foundry building 85 x 70, one story; office building 25 x 40, two stories. They employ 40 hands and do a business of about $75,000 per annum. Their motive power is derived from three Tyler wheels of 125 horse power combined.

Swan & Clark commenced business in 1868, for the manufacture of cottage furniture. They occupy a two story building, 120x40 feet, employing 20 hands and consuming 2,000 feet of stock per day. Their motive power is furnished by Messrs. Edwards, Stevens & Co.

At 107 Arch street, Philadelphia, this firm have their storerooms, where the goods are shipped in the rough state, and there finished ready for the market. At this location are also employed 30 hands.

Merrill, Gardner & Co. commenced the manufacture of sash, doors and blinds, in 1868, occupying the first floor of building occupied by Swan & Clark. They employ 20 hands including three glaziers. Their machinery consists of one Smith's blind sticker, one do. do. tenoner, one do. No. 2 sticker, three saws and common sticker, one ode, two Fay's mortising machines, one Smith's large tenoner, one shaper, one Daniel's planer, one cylinder planer, two scroll saws, two moulding machines, four circular saws and tables, one pointing machine, and one turning lathe. Messrs. Edwards, Stevens & Co. furnish the motive power.

WOODSTOCK, 157¼ miles from Boston and 14¼ from White River Junction. A country station on the Vermont Central Railroad, in the town of Hartford. The village is situated about 10 miles from the station, in the town of Woodstock.

Sayward & Fisher commenced the manufacture of doors, sashes and blinds, in 1866, occupying a building, 60x25 feet. They employ 12 hands and do a business of $10,000 per year. Their motive power is furnished from a 15-horse power wheel.

Daniels Machine Co. commenced business in 1866. Their works are 80x40 feet, 2½ stories high. They manufacture self-feeding cutters, for cutting rags, rope, &c., and for cutting corn stalks, hay and straw for feed. Their manufactory is located 10 miles from Woodstock.

Situated 2½ miles from the above station, is the firm of J. C. Parker & Co., established April 1st, 1866. They have three buildings joined. Main building 64x44, the other two respectively 40x26 and 40x36. Employ about 40 hands. Manufacture fine white flannels. Production of mill, about 200,000 yards per annum. Have 3 sets machinery. Use boiler for heating only. Have a Russell wheel, under 20 feet fall.

WEBB BROTHERS & CO.,

PUBLISHERS OF

Statistical Works, Gazetteers and Directories,

— IN THE —

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Office, 130 Westminster Street.

PROVIDENCE, R. I.

Highland Military Academy,

WORCESTER, MASS.

A Three Years' Academic Course.

Civil Engineering and Scientific Course for Young Men.

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A Large and Highly-Educated Academic Staff. Institution Furnished with a very Extensive Scientific Apparatus, Cabinets of Minerals, Infantry and Artillery Arms, Cavalry Horses, &c., &c.

C. B. METCALF, A. M., Sup't.

MASSACHUSETTS.

ABINGTON, 19¼ miles S. S. E. from Boston, 22 N. W. from Plymouth, and 18 N. N. E. from Taunton, a station in a town by the same name, situated on the highland between Massachusetts and Narragansett bays, on the Old Colony & Newport Railroad. Three rivers rise here, two of which empty into the Taunton, the other into the North. Its Indian name is Manamoeskeagin.

ACUSHNET, 2½ miles from New Bedford, a country station on the New Bedford and Taunton Railroad.

AGAWAM, situated on an inlet flowing into Buzzard's bay, 51¼ miles from Boston, and 29 from Hyannis, on the Cape Cod Railroad. The village contains about 150 inhabitants.

THE AGAWAM CO. was established in 1857. They occupy 2 buildings, 36x40 feet each, for the manufacture of satinets, cassimeres, flannels and stocking yarn. They employ 10 men and 5 girls, run 5 looms. The power is furnished by water wheels, under 12 and 16 feet fall.

ALLSTON, 4 miles from Boston and 40 from Worcester. A village on the Boston and Albany Railroad.

AMESBURY, 44 miles from Boston and 12 from Portsmouth, a village and town at the terminus of the Amesbury Branch of the Eastern Railroad. This town was taken from Salisbury in 1668, and is separated from it by Powow river, a navigable stream for vessels of 600 tons. A pond covering about 1,000 acres back of the town and 30 feet above the sea, serves as a reservoir for a constant and extensive water power. There are in the town 1,000 voters; value of personal property $576,422; real estate $1,773,005; dwelling houses 885; rate of taxation $1.50 on a $1,000.

West Amesbury and South Amesbury are localities in the town of Amesbury. West Amesbury has a population of 1,500, three churches and First National Bank of Amesbury, capital $100,000. South Amesbury, a village of 600 inhabitants, containing one church, three schools, primary, intermediate and high, with 120 children attending. This village is four miles from Amesbury village. The manufacturers are as follows:

LOCKE & JEWELL occupy a two story wooden building 35 x 50 feet, dry room, two stories, 13 x 40 feet, dry room, one story, 18 x 30 feet, located on Morrison's Row, for the manufacture of carriage wheels and running gear. Commenced business in 1867, employ 14 hands, turn out 150 sets of wheels per month. Their machinery consists of four circular saws, one jig saw, two surface planers, one dressing, two rounding, three polishing, one hub mortising machines; one spoke lathe, one boring machine, are driven by an engine 20 horse power, built by the Exeter Machine Works of Exeter, New Hampshire, with one of Brayton's steam generators, built in Exeter, N. H., do a business amounting to $48,000 per annum.

THE AMESBURY MILLS occupy a four story brick mill, 36 x 125 feet, wood, L 34 x 70 feet, three stories; Office 40 x 23 feet, located on Main street, for the manufacture of fancy cassimere goods, incorporated in 1867, capital $126,000, employ 130 hands. Their machinery consists of eight sets, 4,000 spindles, 40 broad looms, is driven by an engine of 80 horse power, Corliss pattern, Providence, R. I., with four tubular boilers, built by the Swanson Machine Company, of South Newmarket, N. H., consume 10,000 pounds of wool and 65 tons of coal per month, turn out 24,000 yards of cassimeres per month, do a business of $[illegible] per annum. Oscar Intigi, treasurer, 69 Franklin street, Boston.

J. R. HUNTINGTON occupies a two-story wooden building,

LOCKE & JEWELL,

Manufacturers and Dealers in all kinds of

Carriage Wheels & Carriage Parts.

All kinds of carriage stock got out to order. All orders promptly attended to.

J. R. LOCKE, }
H. JEWELL, }

AMESBURY MILLS, MASS.

R. O. PATTEN,

MANUFACTURER OF AND DEALER IN ALL KINDS OF

Light Carriages

— AND —

SLEIGHS.

—o—

Buyers will find it to their advantage to give me a call before purchasing.

—o—

PLEASANT STREET, ... AMESBURY, MASS.

60x80 feet, and a two-story building, 30x80 feet. Store house, 25x40 feet, located on Lincoln court, near Main street, for the manufacture of all kinds of light carriages and sleighs. Commenced business January 1st, 1853. Employs 30 hands. Consumes 40,000 feet of ash, hickory and white wood. Turn out from 400 to 500 carriages and 200 sleighs and does a business of $100,000 per annum.

F. D. Parry occupies a two-story wooden building, 50x 30 feet. Store house, two stories, 40x25 feet, located on Friend street, for the manufacture of light carriages and sleighs. Commenced business in 1866. Employs 25 hands. Turns out 300 carriages and does a business of $40,000 per year. See page 168.

R. O. Patten occupies a three-story wooden building, 88x32 feet, located on Pleasant street, for the manufacture of light carriages and sleighs. Commenced business in 1867. Employs 20 hands. Turns out 175 carriages and 50 sleighs, per year. Consumes 20 tons of English iron and 1,500 feet of wood per year. Does a business of $25,000 per annum.

Carr & Allen occupy a two-and-half story wooden building, 50x32 feet, located on Mechanics Row, for the manufacture of light carriages and sleighs. Commenced business in 1868. Employ 13 hands. Turn out 150 carriages and 40 sleighs, and consume 16 tons of iron and 12,000 feet of hard wood per year. Do a business of $22,000 per annum.

R. F. Briggs occupies a two-story wooden building, 32x 100 feet, located on Friend street, for the manufacture of carriages and sleighs. Commenced business in 1865. Employs 20 hands. Consumes $1,000 worth of iron and $1,000 worth of wood per year. Turns out 100 carriages and 75 sleighs, and does a business of $40,000 per annum.

William H. Colby, occupies a three story wooden building, 36 x 70 feet, located on Friend street, for the manufacture of light carriages. Commenced business in 1855; employs twenty-five hands; turns out upwards of 150 carriages per year; consumes 3,000 pounds of English and Norway iron, and 10,000 feet of hardwood per year; does a business of $50,000 per annum.

The representative manufacturers at the village of West Amesbury are as follows :

Thomas B. Patten, occupies a two story wooden building 35 x 35 feet, located on Main street, for the manufacture of carriages. Commenced business in 1835; employs 10 hands; turns out 50 carriages per year; does a business of $12,000 per annum.

M. G. Clement occupies a 3 story wooden building, 36x 34 feet; another, 2 stories, 42 x 30 feet; one, 35 x 36 feet,

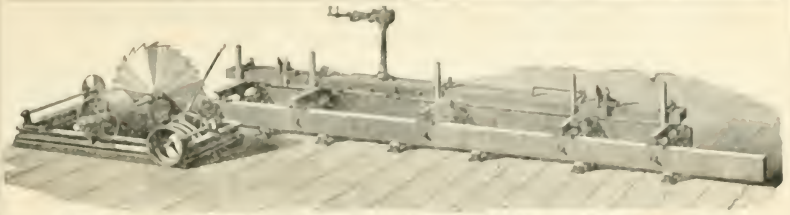
CARR & ALLEN, AMESBURY MILLS, MASS.,

MANUFACTURERS OF

CARRIAGES & SLEIGHS,

OF EVERY DESCRIPTION. ALL WORK WARRANTED.

JOHN C. CARR. *GEORGE ALLEN.*



CIRCULAR SAW MILL.

With Improved Simultaneous Lever Set. Manufactured by

JOHN HUMPHREY & CO., - - - - KEENE, N. H.

See pages 95, 246, and 300.

located rear of Main street, for the manufacture of carriages. Commenced business in 1852. Employs 25 hands, turns out 125 carriages, consumes 15 tons of iron, and 10,000 feet of lumber per year. Business amounts to $40,000 annually.

JOHN HALL occupies a 2 story wooden building, 50x50 ft., located on School street, for the manufacture of light carriages. Commenced business in 1869. Employs 12 hands, turns out 75 to 100 carriages per year; does a business of $20,000 per annum.

GEORGE ADAMS occupies a 2 story wooden building 50x30 feet, located on School street, for the manufacture of light carriages. Commenced business in 1856. Employs 14 hands, turns out 75 carriages and does a business of $40,000 per annum.

LITTLE & LANCASTER occupy a two story wooden building 50x100 feet; store house, two stories, 30x30 feet, located on Lemon, corner of Green street, for the manufacture of light carriages. The business was commenced in 1857, by Mr. Little, and under the present name in 1859. Employ 30 hands; turn out 200 carriages per year; do a business of $50,000 per annum.

JENKINS & GOODWIN occupy a four story wooden building 35x60 feet, located on Main street, for the manufacture of light carriages. Commenced business in 1869. Employ 20 hands; consume $15,000 worth of iron, 15,000 feet of hard wood per year; turn out 120 carriages, and do a business of $40,000 per annum.

C. H. NOYES occupies a three story wooden building, 90x30 feet, located on Main street, for the manufacture of light carriages. Commenced business in 1847. Employs 12 hands, turns out 50 carriages per year.

J. B. SARGENT & CO. occupy a 2 story wooden building, 50x50 feet, with L, 1 story, 30x30 feet, located on Main st., for the manufacture of iron axles. Commenced business in 1852. Employs 8 hands, machinery consisting of 6 engine lathes, five hand lathes, cutting and turning machines, are driven by a brass water wheel, 8 feet diameter, 10 ft. deck, etc. Thus consume 30,000 pounds of refined iron per year, and turn out 7,000 sets of axles. Do a business of $20,000 per annum.

ISAAC JONES occupies a 2 story wooden building, 50x30 feet; store house, 40x40 feet, located on Main street, for the manufacture of light carriages. Commenced business in 1859. Employs 12 hands, turns out 75 carriages per year; does a business of $22,000 per annum.

J. S. NICHOLS occupies a 2 story wooden building, 40x40 feet; store house 50 x 40 feet, located on Lemon street, for the manufacture of light carriages. Commenced business in 1867. Employs 16 hands, turns out 75 carriages per year; does a business of $20,000 per annum.

FOSTER & HOWE, occupy a three story wooden building 50 x 60 feet, one turns stories 30 x 40 feet, one four stories 24 x 30 feet, located on Green street, for the manufacture of carriage wheels and running gear. Commenced business in 1857; employ 26 hands; their machinery, consisting of saws, planers, tenners, wooden, turning, polishing and boring machines, is driven by a rotary engine of 16 horse-power, built by the Atlantic Works of East Boston, with

WILLIAM H. COLBY,

Manufacturer of First Class

CARRIAGES,

OF EVERY DESCRIPTION,

SOUTH AMESBURY, MASS.

CARRIAGES BUILT TO ORDER AND WARRANTED.

WEST AMESBURY MANUFACTURING COMPANY,

Manufacture to order and keep on hand at their Mill in

WEST AMESBURY, MASSACHUSETTS,

A GENERAL ASSORTMENT OF

Carriage Wheels and Running Parts of Carriages,

Warranted of the best material and workmanship.

Also, Stock for Wheels and Carriages, Scroll and Circular Sawing.

☞Orders solicited, and punctually executed.☜

Cash paid for Walnut Plank, Oak and Walnut Spokes.

T. T. MERRILL, AGENT.

one flue boiler built by same firm; turn out 1700 sets of wheels and 3,000 sets of running gear per year. This firm are also manufacturers of Kenney's patent carriage wheel, patented Aug. 18, 1868, they do a business amounting to $50,000 per annum.

THE WEST AMESBURY MANUFACTURING COMPANY, occupy a four story wood building 36 x 93 feet; also a two story building 30 x 50 feet; store house No. 1, two stories 64 x 25 feet; store house No. 2, two stories, 50 x 25 feet; shed for storing lumber 120 x 20 feet, located on Mill street, for the manufacture of carriage wheels and running parts. Incorporated in 1848; capital $50,000; employ 30 hands. Machinery consisting of 41 pieces, such as saws, planers, mortising, tenoning, turning and polishing, and other machines adapted to the business, driven by a portable steam engine 12 horse power, built by the Swamscot Machine Company, of South New Market, N. H., also by two breast wheels, one 26 feet diameter six feet buckets, the others 18 feet diameter 6 feet buckets; turn out 3,000 sets of wheels and 3,000 sets of running gear per year; consume about $30,000 worth of lumber in its raw state per year, and do a business of $100,000 per annum.

The manufacturers at South Amesbury are as follows:

GEORGE W. YORK occupies a two story wooden building, 80x34 feet, located on Main street, for the manufacture of light carriages. Commenced business in 1855. Employs 20 hands; turns out 125 carriages per year; consumes 12 tons of English and Norway iron, and 8,000 feet of ash and white wood per year. Does a business of $40,000 per annum.

W. P. SARGENT occupies a three story wooden building, 35x25 feet; also, one room in another building, 10x10 feet, located on Main street, for the manufacture of light carriages. Commenced business in 1837. Employs seven hands; turns out 50 carriages per year; does a business amounting to $15,000 per annum.

J. WARREN SARGENT, manufacturer of fine carriages. This business was originally established in 1813, by Joseph Sargent, but carried on since 1848 in the above name, at which time it came into his possession. He occupies two buildings, one 34 x 70, three stories, and one 21x50 two stories. Employs 30 men, consumes $30,000 worth of stock, and does a business of about $50,000 per annum.

AMHERST, 85 miles from New London, and 15 from Grout's Corner (now Miller's Falls,) a village and town of Hampshire county, situated on the New London & Northern Railroad. Amherst College is located here, and is a flourishing institution. Incorporated in 1821. It is situated on an elevation and commands a beautiful view of the surrounding country.

ANDOVER. The town of Andover, in the county of Essex, is situated on the southeasterly side of the Merrimac river, on the Boston and Maine Railroad, 3 miles south of Lawrence, 8 miles south of Haverhill, 16 miles northwest of Salem, 20 miles southwesterly from Newburyport, 23 miles north by northwest from Boston, and 467 miles north of Washington, D. C. The town was incorporated in 1646 and called Andover, with reference to some of the first settlers who came from Andover, in Hampshire, England. It contains a population of about 5,500, 800 of whom are voters. The valuation of real estate is $1,718,057, and that of personal property, $812,900. Rate of tax, $1.20 on each $100. There are 8 churches in the town, viz.: 5 Congregational, 1 Baptist, 1 Episcopal and 1 Catholic; also 13 schools, the number of scholars in attendance being about 1,000. The number of dwelling houses is 720, and the number of acres of land taxed is 18,118. There is one savings bank here, called the Andover Savings Bank; also the Andover National Bank, incorporated March, 1826, capital, $250,000. There is one fire insurance company, the Merrimac Mutual, incorporated February, 1828. The institutions for which the town is famous are the Theological Seminary, established in 1808; the Phillips Academy, founded April 21st, 1778; the Punchard Free School and the Abbot Female Academy.

THE SMITH & DOVE MANUFACTURING COMPANY was established in 1836 by Smith, Dove & Co., and became an incorporated company in 1865. They occupy a three story brick mill, 50x90 feet, and a two story stone mill, 40x80 feet, located in Abbott Village, in the town of Andover, for the manufacture of yarns, twines and threads, principally shoe thread. They run 1,852 spinning spindles and 520 twisting spindles, employing 180 hands and consuming about 700 tons of flax per year. Their machinery is driven by two engines of 70-horse power, with four flue boilers of 50-horse power each, and two iron water wheels, 5 feet diameter, built by Geo. T. McLauthlin & Co., of Boston. Also an engine of 25-horse power, built by Otis Tufts, of East Boston.

HENRY G. TYER occupies a three story brick building, 50 x65 feet, with an ell, 45x60 feet, located on Main street, for the manufacture of zephyr overshoes and plain elastic goreing. He commenced business in 1867, and gives employment to about 50 hands. The machinery used is driven by an engine of 50-horse power, built by E. Kelley, of New Brunswick, N. J., with a flue boiler of 50-horse power, built

THOMAS BARR & CO.,

Woolen Printers.

BOCKINGS, TABLE COVERS, AND CARRIAGE ROBES,

Printed and finished in the best style.

HIGH STREET, - - - - - - - - - - - - ARLINGTON, MASS.

THOMAS BARR. JOHN KING. JAMES KING.

by the Atlantic Works, of East Boston, and a tubular boiler of 25-horse power, built by the Swamscot Machine Co., of South Newmarket, N. H.

ARLINGTON, 6 miles from Boston and 5 from Lexington, a village of about 2,500 inhabitants and four churches, on the Lexington & Arlington Railroad. Arlington, like many other towns in the vicinity, is the home of many Boston merchants.

THOMAS BARR & CO., woolen printers, commenced business in 1865, on High street, occupying a three story building, 80x50 feet, and employing 16 hands, printing 120 bales bocking carpeting, 20 bales sleigh robes and 1,000 bales table covers per year. The printing is all done by hand stamp.

LOCKE PRINT WORKS, established by William H. Locke, commenced business in 1863, on High street, for the printing of woolen goods, more attention being paid to his establishment in New York. The building occupied is 150x75 feet, three stories, and the number of hands employed is 15. His machinery, consisting of 2 woolen printers, are driven by a 60-horse power engine, built by Allen & Endicott, of Cambridgeport, with two tubular boilers for supplying the steam; also has a 50-horse turbine wheel, under 20 feet fall.

ARSENAL, 6½ miles from Boston and 4 from Waltham. A station on the Watertown Branch, in the village of Watertown. The United States Arsenal is located here, which, during the war, employed nearly 1,000 persons. It is situated on the North bank of the river, a short distance below the village of Watertown, and occupies a site of from 40 to 50 acres. At the commencement of the Revolutionary War, this place was the chosen seat of the Continental Congress. That body of patriots was in session at Watertown on the day of the battle of Bunker Hill.

WM. F. FREEMAN & CO. commenced business just below the depot, about 13 years ago, for the manufacture of dye stuffs, occupying a two-story building, 40x100 feet, and employing 14 hands. His machinery, consists of one two-cylinder cutter, for cutting wood, which turns out about 10 tons per day; a set of stones for grinding wood and a vacuum pan for making extracts, liquors, &c., turning out two tons daily; also has two copper kettles for boiling colors after they are extracted from the wood. The motive power is furnished by three steam engines, one built by the Corliss Steam Engine Co., of Providence, R. I., of 75-horse power, and the other two, by Mr. Adams, of South Boston, Mass., who also built their boilers consisting of 4 tubular.

ASHBURNHAM, 11 miles from Fitchburg and 61 from Boston. A village and town on the Vermont and Massachusetts Railroad. The town was incorporated in 1765, and lies on the height of land between the Connecticut and Merrimac rivers. It is watered by large ponds.

ASHLAND, 24 miles from Boston, and 20 from Worcester. A station and town on the Boston and Albany Railroad.

GEORGE B. COLE occupies four rooms on third floor of wooden building known as Central block, and located on the corner of Main and Summer streets, for the manufacture of boys', youths' and children's split and grain boots. He commenced business in 1866 and employs 15 hands.

H. NEWHALL & CO. occupy a three story wooden building, 45x50 feet, and manufacture boots of every description. They commenced business in 1865, and turn out 3,000 cases of boots per year; consuming 9,000 sides of leather, and doing business to the amount of $80,000.

Their salesroom is located at No. 39 Pearl street, Boston, Mass.

P. BLAKE & CO. commenced business in 1864. They occupy a wooden building 30x50 feet, located on Front street, and manufacture boots of every description. They employ 50 hands, and turn out 3,000 cases, (12 pairs per case,) of boots per year; consuming 8,000 sides of leather, and doing business to the amount of $75,000 per annum.

ROBERT A. TAGGART occupies the second floor of a 1 story wooden building, 36 feet square, located on Concord street, and manufactures express wagons, buggies, &c. He commenced business in 1868, and employs 6 hands.

ALBERT LELAND occupies the second floor of a three story wooden building, 40x81 feet, located at the corner of Main and Summer streets, and known as Central Block, where he manufactures men's, boys, youths', and children's boots. He commenced business in 1870. Employs 24 hands, and turns out 40 cases of boots per week; doing business to the amount of $50,000 per annum.

SEAVER & SONS occupy a 3 story wooden building, 44x 60 feet, located on Front street, and manufacture men's, boys', youths' and children's boots. They commenced business in 1861; employ 50 hands, turn out 100 cases of boots

per week, and consume from 100 to 150 sides of leather per week; doing business to the amount of $30,000 per annum.

Washington Mills Emery Co. occupy three two story wooden buildings; one 30x120 feet, one 30x30 feet, and the other 30x20 feet; for the manufacture of emery. The business was established in 1855, and incorporated in 1868. They employ 10 hands, and turn out 400 casks of emery per month,—ground from the emery stone imported from Smyrna. They do a business of $100,000 per annum. Their machinery is driven by a 30 horse power engine, built by the Amoskeag Manufacturing Co., of Manchester, N. H. They also run 3 iron water wheels, each 4½ feet in dimeter, built by the American Water Wheel Co., of Boston, Mass.

Charles H. Tilton occupies a four story wooden building 165x35 feet, with a wing 32x22 feet, where he manufactures boots and shoes. Also, occupies a wooden building, two stories, 30x38 feet, for the manufacture of lasts; and another for the manufacture of boxes and nails. He commenced business in 1852; employs 350 hands, and turns out 1,500 cases of boots and 500 cases shoes per month; consuming 550 sides of leather per day. He also produces $10,000 worth of lasts, and $5,000 worth of nails per year. The machinery is driven by a 25 horse power engine, built by Brown, of Fitchburg, Mass., supplied with steampower from a Harrison boiler. The amount of business done is $450-000 per annum.

This factory is pleasantly situated on Pleasant street, near the railroad. Connected with the mill there are 80 acres of land partly covered with cottages for the employees. The business was established in 1852, in a two story wooden building 18x24 feet, employing at that time but two men, and has since increased to its present size through the management of Mr. Tilton. The factory is now heated by steam in every part. (See page 151.)

C. M. Adams & Co. occupy four rooms in a three story wooden building, known as Central block, and located at the corner of Main and Summer streets, for the manufacture of boots. They commenced business in November, 1866, and employ 18 hands, turning out 30 cases of boots per week.

ASHLEY FALLS, 75 miles from Bridgeport, and 35 from Pittsfield, a small village located on rising ground, one-fourth of a mile from the Housatonic river, in the town of Sheffield, on the Housatonic Railroad. Contains one church.

ASSABET, 28 miles from Boston, a country station on the Marlboro' Branch Railroad.

ASSONET, 45 miles from Boston, 3½ from Taunton, a country station in the town Freetown, on the Old Colony & Newport Railroad.

ATHOL, 33 miles from Fitchburg 83 from Boston, and 53 from Hoosac Tunnel, a village and town on the Vermont & Massachusetts Railroad. The village is situated on high land, and contains about 1500 inhabitants, 2 churches, one bank, and is rapidly increasing. The Indian name of this town is *Paquiog*. Miller's river passes through the town and affords Athol a great water power. The town was incorporated in 1762.

W. A. Fisher & Co. This firm commenced the manufacture of sheetings, drillings and satinet warp, in 1865. The business was established 57 years since by Holbrook & Nickerson, since which time there has been several changes in the firm. The mill is situated in the upper part of the village on the river, and is 117 x 34 feet, 3 stories, running 2,720 spindles and 60 looms, and turning out 14,000 yards sheetings and drillings, and 10,000 yards satinet warp per week, consuming 5,000 pounds cotton. They employ 75 hands. The machinery is driven by a 75 horse power Chase's turbine wheel. The other buildings connected with this mill consist of a machine shop, 32 x 28, 2 stories, and cotton house, 50x20, 1 story.

George H. Richardson, manufacturer of match and sash machiney and a general machinist, commenced business in 1862, on Main street, occupying the second story of a building 100x40 ft. He now is manufacturing on contract, and making 12 to 15 Novelty Printing Machines per week, employing six hands. He derives his motive power from a four horse current wheel.

O. Kendall & Son commenced business at No. 60 and 62 Main street, in 1855, for the manufacture of calfskin boots. The business was established in 1834 by O. Kendall. They now occupy a two story building, 38x32 feet, with an addition 16x26 feet, two stories, employing 30 hands, turning out three cases per day, and consuming 80 pounds sole leather and 40 pounds upper leather per week.

Athol Machine Co. This company was incorporated in 1868, with a capital of $25,000, for the manufacture of Sterritt's patent meat and vegetable choppers, of different sizes. G. S. Johnson, President, J. S. Parmenter, Treasurer; and L. S. Sterritt, Agent. They at present occupy a two story building, situated in the lower part of the village, 35x60 ft., contemplate building on, in the spring, an addition to this building, making it about 120 x 35 feet. They employ 20 hands, and make about 50 machines per day. This machine was invented and patented by L. S. Sterritt, the agent of the company, in 1865, and first commenced the manufacturing of them in Northbridge. Their motive power is furnished by a 20 horse power turbine wheel.

H. Mann commenced business at 15 and 17 Exchange st., in 1867, for the manufacture of furniture, occupying 2 buildings. One, 40x28 feet, 2 stories, and the other 40x30 feet, 2 stories. He employs 4 hands, and does a business of from $12,000 to $15,000 per year.

Jones & Baker, who commenced business in 1850, are the successors of Frederick Jones, senior member of the present firm, who has conducted the business for the past forty years. They occupy a factory two stories high, 60x24 feet, with an ell, 30x26 feet, two stories and basement. They employ 60 hands and produce 40,000 pairs of boots yearly, doing a business of about $100,000. They also have a tannery adjoining their boot factory, where they employ 6 hands and tan and curry annually about 2,400 hides.

Charles M. Lee, manufacturer of boots and shoes, commenced business in 1850. His factory is 80x22 feet, and is one of the best arranged in the State, and the proprietor turns his nineteen years experience to good account in the manufacture of proverbially excellent goods. He employs about 75 hands, and turns out 2,000 pairs of boots and shoes per month. His machinery embraces all the latest and most efficient improvements, and includes 12 sewing machines, pressing, sand-papering, buffing machines, and a steam pegging machine. A steam engine of 8-horse power drives the machinery.

J. E. Stone established business in 1850, for the manufacture of piano-forte tops and cases, piano-forte, billiard table and melodeon legs. He occupies two buildings, one 30x60 feet, two stories, and the other 40x60 feet, four stories high, with two wings. He employs 40 hands and produces

$50,000 worth of the above articles yearly. His factory is located on Miller's river, the machinery being driven by water power, rated at about 1,000-horse. His warerooms are situated in Greenfield, Mass.

F. G. & C. L. Lord & Co. This firm was established in 1858. They occupy two buildings; one 18x24 feet, 2 stories, and the other 21x25 feet, 3 stories, where they manufacture men's and boys' thick pegged calf boots. They employ 35 to 40 hands, and produce about 11,000 pairs of boots per annum; doing business to the amount of about $40,000.

J. Oliver manufactures garden rakes, potatoe diggers and fish spears, from the best of iron, producing 6,000 dozen rakes and diggers yearly. He runs 2 planing machines. His workshop is 75x30 feet, and connected therewith is a lumber yard.

The firm of Adams & Stratton began the manufacture of sewed and pegged boots for the retail trade about a year ago, and are now doing a business of $20,000 per year. They employ 6 hands, which number, the increase in their business will render it necessary to enlarge.

The Wool and Waste Dusters, for cleaning purposes, made by George Gerry, are said to be the best machines of the kind in use. About 700 of them have been made and are now in successful operation. Besides these, Mr. Gerry manufactures shafting, mill gearing, saw arbors, chair lathes, &c., employing 6 hands, and using water power. He has been established in business 14 years.

Seeing that the field of leather and iron manufacture was so well occupied as is indicated above, W. W. & H. L. Fish determined to engage in the manufacture of wood-work. They therefore established a carriage factory about a year ago, and have received the fullest encouragement in their enterprise. They employ about 10 hands in the busy season, and have facilities for turning out 100 carriages of various kinds per year. Their machinery is driven by water-power.

ATLANTIC, 5½ miles from Boston on the Old Colony and Newport Railroad.

ATTLEBORO', 12½ miles from Providence, 31 miles from Boston. A village and town on the Boston and Providence Railroad, containing an area of 40 $\frac{6}{10}$ square miles. A branch of the Pawtucket or Blackstone river rises here. Robinsonville, Attleboro' Falls and North Attleboro' are villages in this town.

Hayward & Briggs, manufacturers of fine plated jewelry, occupy a room 65 x 35 feet in a four story wooden building located opposite the depot. They commenced business in 1854, have 35 employees, and do a business of $80,000. An engine of 40 horse power, owned by the occupants of the building, drives their machinery. Office and salesroom in Mercantile Bank building, 191 Broadway, New York City.

Bates & Bacon occupy a room 65 x 35 feet, in four story building situated opposite the depot, where they manufacture a variety of fine plated jewelry, employing about 30 persons, and doing business to the amount of $50,000 per annum. An engine, belonging to the occupants of the building, 40 horse power, drives their machinery.

William A. Sturdy commenced business in 1854, and manufactures plated jewelry, occupying a room 65 x 35 feet in four story wooden building located opposite the depot, employing 30 persons, and doing business to the amount of $[illegible]. His machinery is driven by an engine of 40 horse power belonging to the building.

Sturdy Brothers, manufacturers of plated jewelry, occupy a room 55 x 35 feet, in four story wooden building situated opposite the depot. They commenced business in 1858, have 30 employees, and do business to the amount of $65,000. Office and salesroom 14 Maiden Lane, New York City. Their motive power is furnished from the companies' engine of 40 horse power.

Day, Bliss & Dean occupy a room 55x35 feet, in four story wooden building located opposite the depot, for the manufacture of fine plated jewelry. They commenced business in 1857. Have 25 employees, and do a business of $60,000 per annum. The company's engine of forty horse power drives their machinery. Office and salesroom 24 John street, New York City.

Robinsonville, 2½ miles from Depot and half mile from Falls Village, 1½ miles from North Attleboro'. No post office.

Attleboro' Falls. Three miles from depot, one from North Attleboro'.

George W. French, manufacturer of gilt and plated jewelry, occupies a room 60x40 feet, in two story wooden building. He commenced business in 1861, has 20 employees, and does a business of $30,000 per annum. Motive power furnished from an engine in adjacent building. Office, 205 Broadway, New York City.

Wilcox & Barnett occupy the lower floor of two story wooden building, 40x60 feet, where they manufacture jewelers' tools, shafting, pulleys, &c., employing five persons. The business was commenced in 1861. Their machinery, consisting of lathes, planers, drills, &c., is driven by an engine in building adjacent.

North Attleboro'. The largest village in Attleboro' contains three churches, is situated about four miles from the railroad station.

The Whiting Manufacturing Company, capital $130,000, incorporated in 1867, occupy one floor of three story stone building, 215 x 40 feet, where they employ 200 hands in the manufacture of sterling silver ware, in elegant and artistic designs, embracing every variety known to the trade. Their machinery is driven by an engine of 40 horse power, "Noble T. Greene's patent," supplied with steam from two cylinder boilers, all built by the Providence Steam Engine Company, of Providence, R. I. They also run an Hyham Turbine Water Wheel of 10 horse power, with a fall of 10 feet. Their office and salesrooms are at 181 Broadway, New York City, and 21 School street, Boston. Do a business of $200,000 per annum.

S. S. Ginnodo & Co., manufacturers of fine gold jewelry, occupy a room 100 x 40 feet, in three story stone building. They commenced business in 1861, and have 35 employees. The Whiting Manufacturing Company's engine furnishes their motive power. Office in New York, 177 Broadway.

S. S. Guild commenced business in 1861, and manufactures gilt and electro-plated jewelry, employing 12 persons. He occupies a room 50 x 40 feet in a three story stone building. The Whiting Manufacturing Company's engine furnishes the motive power.

Guild & Hall occupy a room 50 x 40 feet, in a three story stone building, and manufacture all kinds of jewelry. They commenced business in 1865 and have 12 employees. The Whiting Manufacturing Company's engine furnish their motive power.

E. Y. Kingman & Son, manufacturers of gilt and plated jewelry, commenced business in 1859, and employ 12 persons. They occupy a room 50 x 40 feet, in a three story

stone building. The Whiting Manufacturing Company's engine supplies steam for driving their machinery.

Draper, Pate & Bailey occupy a room 100 x40 feet, in three story stone building, and manufacture plated jewelry, employing 45 persons. The business was established by Bailey & Pate in July, 1864, and carried on by the present firm since May, 1868. The engine of the Whiting Manufacturing Company furnishes their motive power.

Stephen Richardson & Co., manufacturers of plated jewelry, chains, buckles, combs, &c., occupy a two story wooden building 120 x 22 feet, with an engine and boiler room 32 x 25 feet, and have 60 employees. An engine of 8 horse power built by J. T. Wells of New York City, supplied with steam from a tubular boiler, 15 horse power, built by the Providence Steam Engine Company of Providence, R. I., furnish their motive power. Office and salesroom 177 Broadway, New York.

J. J. & J. M. Richards occupy a room 75 x 45 feet in three story wooden building, for the manufacture of plated jewelry of all kinds. They commenced business in 1864, and have 45 employees. Their machinery is driven by an engine of 40 horse power in building adjacent. Office and salesroom 179 Broadway, New York City.

Whitney & Rice, manufacturers of gilt and plated jewelry, occupy the lower floor of two story wooden building, 235 x 25 feet. The business was established in 1849 by Davenport & Whitney. Has been carried on by the present firm since 1859, who employ about 70 persons, doing a business of from $75,000 to $100,000 per annum. Power furnished from engine in building adjacent. Office and salesroom 79 Broadway, New York City.

The firm of A. Bushee & Co. has been established about one year, in the manufacture of jewelry and fancy metal goods. They employ about 20 hands, with steam power, and can turn out a monthly product of $3,000. Their factory is 25 by 20 feet and contains 4 lathes, rolling-mill, stamps, presses and other machinery.

Feminine vanity is specially regarded by Day, Bliss & Dean, who, while making all kinds of plated jewelry, give special attention to ladies' chains; and avoiding the imputation of partiality, they make gentlemen's chains also. They have been established 12 years, employ 25 hands, and can turn out about $5,000 worth of goods per month, which are sold principally to the New York trade, their salesrooms in that city being at 24 John street.

The facilities of Charles E. Carpenter, manufacturer of straw goods, of foreign and domestic straw, are equal to the production of 10,000 hats per week. He occupies a factory 60x40 feet and three stories, with an L, 40 x 35, employs 50 hands on the premises, and gives work to 300 outside. The goods of his manufacture are sold in New York.

Auburn, 4¾ miles from Worcester, 55¼ from Norwich. A country station on the Norwich and Worcester Railroad. About three-quarters of a mile from the depot is the

Stoneville Mill, C. W. & J. E. Smith, proprietors, N. S. Fisher, agent. They commenced the manufacture of sheetings about the year 1860. The mill is 100x40 feet, three stories and basement, containing 3,960 spindles, 90 looms; employing 70 persons, consuming 950 pounds of cotton per day, and producing 21,000 yards per week; two Monroe three feet iron wheels furnish the power. The water is obtained from a small stream, a tributary of the Blackstone, the fall being 22 feet.

H. M. Witter & Co. occupy a mill a few feet from the one described above, for the manufacture of narrow silk, worsted, cotton and linen tapes, commencing here in 1865. They employ 20 persons, producing 1,200 yards per day. The building is 100x40 feet, three stories; an 18x14 breast wheel furnishes the power; the fall is 22 feet.

Auburndale, 10 miles from Boston and 34 from Worcester, a station on the Boston & Albany Railroad in the town of Newton. Population about 1,000.

Baldwinville, 21 miles from Fitchburg and 35 from Greenfield, a village containing one church and 800 inhabitants, on the Vermont and Massachusetts Railroad, and in the town of Templeton.

Ballardvale, 21 miles from Boston and 5 from Lawrence, a station in the town of Andover on the Boston & Maine Railroad.

Bardwell Ferry, 8 miles from Greenfield and 5 from Shelburne Falls, a flag station on the Vermont & Massachusetts Railroad, on the banks of the Deerfield river.

Barnstable is the county seat of Barnstable county; contains the Jail and Court House. It is situated on the Cape Cod Bay, 73¾ miles from Boston and 60 from Hyannis, on Cape Cod Railroad. Barnstable contains about 1,200 inhabitants, two churches and one bank. It is noted for its fisheries. Vessels with eight feet of water can enter here.

Barrington, 144 miles from New York, 176 from Boston, 74 from Albany, 85 from Bridgeport and 25 from Pittsfield. A village and town by the same name in Berkshire county on the Housatonic Railroad and river. The village contains 4 churches, 1 bank and 4,000 inhabitants. The Berkshire Hotel is a favorite summer resort for parties and boarders during the heated season.

The Berkshire Woolen Company was incorporated in 1836; capital $100,000. The present officers of the company are J. C. Russell, President; A. C. Russell, Agent. This company run 15 sets woolen machinery, weaving about 70,000 yards cloth per month. Their factory building built of stone is 160 x 50 feet, 4 stories; employing 300 hands. They have three other buildings, used for sorting wool, &c., &c. Their motive power consists of 9 turbine wheels of 250 horse power, and a 125 horse power Woodruff & Beach's steam engine, with 2 tubular boilers, built by Campbell, Whittier & Co., of Boston, and 1 flue boiler, by Clary, Sedgwick & Russell, of Pittsfield, Mass.

Becket, 65 miles from Albany, 135 from Boston and 63 from Hartford. A village and town on the Boston and Albany Railroad. The village contains three churches, and has a population of 300. The town is an elevated farming region, on the Green Mountain range in Berkshire county. Westfield, Farmington and Housatonic rivers receive the waters of several ponds here.

BECKLEY, DUSTON & Co., commenced business in 1848, for the manufacture of hook, screw and wall paper. Their mill is situated opposite the Middlefield depot, four miles from the village of Becket, and is 72x30 feet, three stories; machine room attached, 80x24 feet, one story; blench house, 30x30 feet, one story. Employ 24 hands. They turn out about 2,500 pounds per day. The motive power is furnished by one over-shot wheel, 26 feet diameter, 14 feet high, of 80 horse power. Their second mill is situated about a quarter of a mile southeast, in the town of Middlefield. The capacity of this mill is about two tons of paper per day; employ 20 hands. They also have here a 80 horse power over-shot wheel, 18x17 feet.

BELCHERTOWN, 76 miles from New London, 24 from Grout's Corner, (now Miller's Falls,) and 93 from Boston. A village and town in Hampshire county, on the New London Northern Railroad. This town was originally called Cold Spring. It was settled in 1732. The soil is of excellent quality and well improved. The town took its name from Gov. Belcher; population, 2,636.

BELLINGHAM, 31 miles from Boston, 6¼ from Woonsocket and 22¼ from Providence, situated one-quarter mile from depot, a village of about 300 inhabitants, and contains one church. A branch line running from Milford, a distance of six miles, connects here with the Boston, Hartford and Erie Railroad, Woonsocket division.

BELMONT, 6 miles from Boston, and 44 from Fitchburg, a village containing 1 church and about 500 inhabitants, on the Boston & Fitchburg Railroad.

BEMIS FACTORY, 9 miles from Boston, and 1½ from Waltham. A village on the Watertown Branch and on the Charles river, which divides this place from Newtonville.

THE ÆTNA MILLS. This company manufacture woolen cassimeres, was incorporated in 1864 with a capital of $250,000; I. D. Farnsworth Treasurer, Nathan Fry, President, and A. G. Davidson, Agent. Their mill building is 200 x 54 feet, mostly 4 stories. Boiler house adjoining, 40 x 40 feet 1 story; adjoining the boiler house is their packer house, 2 stories, 50 x 50, and the dye house adjoining, 70 x 30, 1 story. The machine shop and dry room is 50 x 30, 2 stories. Office and counting room, 24 x 40, 2 stories. This company run 12 sets woolen cards, 68 broad looms, employ 220 hands, using about 1,400 pounds cleaned wool per day, and turning out about 15,000 yards finished goods per month. Their motive power is furnished from a 6 feet in diameter turbine wheel with 14 feet fall, of 60 horse power, and a Corliss steam engine of 125 horse power for heating the mill and furnishing steam for the engine they have 2 tubular and 2 flue boilers made by Allen & Endicott.

BERKSHIRE, 7 miles from Pittsfield, and 13 from North Adams, a manufacturing village of about 800 inhabitants, on the Pittsfield and North Adams Railroad.

PAGE & HARDING commenced business in 1858; capital $150,000. This business was established by the Berkshire Glass Co., in 1850. This company manufactures the Berkshire crystal glass, for windows and doors, occupying nine buildings, with dimensions as follows: No. 1, 80x80, 1 story, glass foundry; No. 2, 100x80, 3 story, glass foundry; No. 3, 80x120, 1 story, flattening house; No. 4, 90x140, 1 story, cutting shop; No. 5, 40 x 40, 2 stories, pattern rooms; No. 6, 30x70, 2 stories, pattern rooms; No. 7, 20x30, 1 story, blacksmith's shop; No. 8, 20x60, carpenter's shop; No. 9, 30x40, 2 stories, saw mill, where their boxes are made. They employ 140 hands, and turn out 1,800 tons glass per year. The motive power is furnished by 2 turbine wheels of 75 horse power. The company annually consume 5,000 tons coal and 1,500 cords wood.

BERLIN, 40¾ miles from Boston, and 17¾ from Fitchburg. A village and town on the Boston, Clinton and Fitchburg Railroad. This town was taken from Bolton in 1784. A branch of the Assabet affords this town good water privileges.

BERNARDSTON, 43 miles from Springfield and 7 from South Vernon. A station and town on the Connecticut River Railroad. This is a township of superior land for agricultural purposes, considerably elevated between Fall and Connecticut rivers. Incorporated by its present name in 1764. The village is situated about half a mile from depot, and contains three churches.

BEVERLY, a town of 6,500 inhabitants, located on the Eastern Railroad, 18 miles from Boston and contains 9 churches, viz.: 3 Congregational, 2 Baptist, 1 Unitarian, 1 Universalist, 1 Episcopal and 1 Methodist; also has 1 bank, the Beverly National and Beverly Savings Bank and 1 Fire and Marine Insurance Company. The number of voters is about 1,600; number of children attending school 1,175. The post office is located in Masonic Block, a three story brick building, located at the corner of Washington and Cabot streets, and contains 640 boxes, also 24 lock boxes. There are 3 mailings outward and inward and two eastern, each day. The town was settled in 1629 and incorporated in 1668.

The first cotton factory in America was incorporated February 5, 1789, by the legislature of Massachusetts. It was located in the west parish of Beverly, and owned by Hon. George Cabot and Dr. Joshua Fisher. The corporators named in the act were John Cabot, George Cabot, Deborah Cabot, Andrew Cabot, Moses Brown, Joshua Fisher, Israel Thorndike, James Lee and Thomas Somers and Isaac Chapman of Beverly, and Henry Higginson of Boston. The charter granted the right to own £10,000 of personal and £30,000 of real estate. The Salem *Register* says President Washington visited this mill October 30, 1789. The work, both of carding and spinning, was probably done by hand, as when the cotton was sold to Samuel Blanchard of Waltham and George S. Johonnot of Salem, they entered a suit on Rate error for spinning by some power. A mill with 22 spindles for spinning cotton, was set in operation at Pawtucket, R. I., in 1792. These spindles were increased in 1805 to 2,000, making it the largest spinning mill in America. In 1808 no less than 84 cotton factories, with 70,000 spindles were set in motion in the States of Rhode Island.

SIMS NEWHALL & CO. occupy a 2 story wooden building 60x20 feet, with an L 20x20 feet, located on Redwood ave., for the manufacture of ladies' and misses' boots and shoes. Commenced business in 1866. Have 6 lasts; cross 125 machines and turn out about 102,000 pairs per annum, doing business to the amount of $100,000.

F. E. Porter & Co. occupy a 4 story wooden building, 50x30 feet, located on Railroad avenue, for the manufacture of ladies' and misses' boots and shoes. Commenced business in 1854. Have, in good times, 80 employees, and turn out 72,000 pairs per annum; doing business to the amount of $100,000. This firm have an office in Boston, at 126 Pearl street.

Daniel Foster 2d occupies a 2 story wooden building, 35 x 25 feet, with an ell, 30 x 20 feet, located at No. 64 Railroad avenue, for the manufacture of ladies' and misses' boots and shoes. Commenced business in 1845. Has in good times 75 employees and turns out 100,000 pairs per annum, doing business to the amount of $125,000.

Larcom & Galloup occupy a 3 story wooden building 45 x 25 feet, located on a line with the Eastern Railroad, for the manufacture of ladies' misses' and children's boots and shoes; commenced business in 1867, and turn out 600 pairs of boots per week.

C. H. Butman & Co. occupy a 3 story wooden building, 45 x 25 feet, located on Railroad avenue, for the manufacture of ladies', misses' and childrens' slippers and buskins, of which they turn out 60,000 pairs per annum, employing 60 hands and doing business to the amount of $75,000. These goods are sold in all parts of the Union.

Allen, Leavitt & Co. occupy a three story wooden building, 80x40 feet, used as a steam mill for getting out stock, &c.; also, occupy a three story wooden building, 100 x40 feet, a two story wooden building, 45x35 feet, and a 1½ story wooden building, 45x30 feet, used as cabinet shops for the manufacture of cabinet furniture, chamber sets, &c. located on Congress street. The business was established in 1848, by Allen & Decker, and has been carried on by the present firm since September, 1867. This firm consume about 300,000 feet of lumber annually, giving employment to about 50 hands. Their machinery, consisting of turning lathes, planing and moulding machines, circular and jig saws, &c., is driven by an engine of 18 horse power, built by George N. Newcomb, of Salem, Mass., with one flue boiler, 50 horse power, built by James Tetlow, formerly of Salem. Do business of upwards of $200,000. Office and salesrooms, 35 Sudbury street, Boston.

Lawrence & Bodge occupy a 2 story wooden building, 28x27 feet, used as a pottery, with a mill house attached, 1 story, 28 x 27 feet, used for grinding clay; store house 27 x 20 feet; kiln house, 33 x 17, 2 stories, in which is a kiln capable of holding 2,000 pots, weighing each 6½ lbs., and 10,000 flour pots; ware room, 1 story, 55x20 feet, located on Federal and Riverside street. Messrs. L. & B. commenced the manufacture of earthern ware, in 1868. Employ 10 hands. Post office box, 252.

Foss & Ingalls, manufacturers of furniture, bedsteads, bureaus, glasses, frames, &c., commenced business in 1868, occupying, on Cabot street, a 3 story frame building, 50x25 feet, have 11 employees, their machinery consisting of planing and moulding machines, jig saws, &c., is driven by a 30 horse power engine, situated in building adjacent.

Buckley & Co. occupy a 3 story brick building, 60x30 feet, used as a mill; also a 3 story frame building, 60x30 ft. used as a cabinet shop, located on the corner of Congress and Wellman sts., for the manufacture of cabinet furniture. Commenced business in 1862. Have 80 employees, and do a business of $20,000 per annum. Their machinery is driven by a 10 horse power engine, made by Geo. L. Newcomb, of Salem, Mass., furnished with steam from a 15 horse power flue boiler.

Creesy & Wallis commenced business in 1867, as manufacturers of ladies', misses' and children's boots and shoes, occupying a 3 story wooden building, 34x40, located on Park street, near the railroad station. They employ 35 hands, and turn out about 40,000 pairs of boots per annum. Business amounts to nearly $70,000.

Hervey Lunt. In 1859, Mr. Lunt commenced the manufacture of ladies' and misses boots and shoes, occupying a three story wooden building, 58 x 22 feet, situated at No. 68 Railroad avenue. Employs 25 hands; doing a business of $40,000 per annum.

Cole, Wood & Co. occupy a three story brick building, 50 x 50 feet, located No. 54 Cabot street, for the manufacture of ladies', misses' and children's boots and shoes; employ 100 hands and turn out about 70,000 pairs per year; commenced business in 1859. Office and salesroom No. 15 Pearl street, Boston, Mass.

W. A. Smith, manufacturer of ladies', misses' and children's boots and shoes, occupies a 3 story wooden building, 20 x 35 feet, with an ell 14 x 20 feet, located corner of Bow and Park streets; employs 8 hands, turns out about 6,000 pairs per year, and does business to the amount of $6,000; commenced business in 1855.

George A. Woodbury occupies 2 floors of a 4 story wooden building, 36 x 24 feet, located on Park street, where he employs 20 hands in the manufacture of ladies', misses' and children's boots, shoes and slippers; commenced business in 1866.

Perry & Preston, successors to Foster and Young, occupy a 4 story wooden building, 28 x 90 feet, located opposite the Eastern Railroad depot, for the manufacture of ladies' and misses' boots and shoes; employ about 125 hands; turn out 3,000 pairs per week; commenced business in 1866; machinery is run by an engine of 12 horse power, with a flue boiler of 20 horse power, built by George L. Newcomb of Salem, Mass.

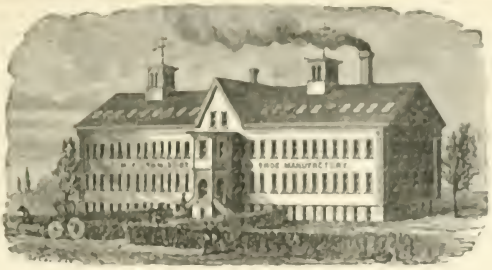
A. P. Burnham occupies two floors of a four story wooden building, 20x36 feet, located on Park steeet, for the manufacture of ladies' and misses' boots, shoes and slippers. He commenced business in 1866. Employs 12 hands, and does business to the amount of $35,000 per annum.

John Lefavre & Co., manufacturers of ladies' and misses' boots and shoes, occupies a three story wooden building, 22 x24 feet, located on Park street. Commenced business in 1866. Employ 20 hands, turn out about 30,000 pairs per year, and do business amounting to about $40,000.

Marsters & Walker occupy a two and half story wooden building, 26x35 feet, located on Park street, for the manufacture of ladies' and misses' machine and hand made boots and shoes. They employ 100 hands, turn out 2,000 pairs per week, and do business to the amount of $100,000 per year. Commenced business Jan. 1st, 1866.

Israel Foster, manufacturer of ladies' and misses' boots and shoes, occupies a three story wooden building, 22x36 feet, located corner of Railroad avenue and Randall street, where he employs from 40 to 50 hands; and does business to the amount of about $60,000 per annum. Commenced business in 1868.

Allen, Leavitt & Co. established business in August, 1867. They occupy seven buildings, making a total of flooring of about 5,000 square feet. Employ from 60 to 100 hands, and manufacture cabinet furniture of all kinds. They run 10 machines, such as planers, saws, moulders, &c. Consume between 200,000 and 300,000 feet of lumber, and do a business of $200,000 per annum. To drive their machinery they use an engine of 30 horse power.



CHARLES H. TILTON,

MANUFACTURER OF

BOOTS, SHOES AND LASTS.

ASHLAND, MASS.

Salesroom, No. 102 Pearl Street, Boston, Mass.

BEVERLY FARMS, 21 miles from Boston and 5 from Salem. A country station in the town of Beverly, on the Beverly Branch of the Eastern Railroad.

BILLERICA & TEWKSBURY, 19 miles from Boston and 21 from Nashua. A station on the Boston, Nashua and Lowell Railroad. The town of Billerica is watered by the Concord and Shawsheen rivers. Its soil is good and well improved. First settled in 1653. Incorporated in 1655.

The town of Tewksbury was called by the Indians Wansoon, and was incorporated in 1734. The surface of the town is level and the soil light and sandy.

BIRDS, 16¾ miles from Boston, a country station on the Stoughton Branch Railroad.

A. Southworth & Co., [illegible] 22x30 feet, 2 stories and basement, for the manufacture of [illegible], [illegible] & [illegible]. Located half a mile from this station on a small stream having a fall of 12 feet. The business was established by Cornelius Southworth, in 1824, and continued by his sons and grandsons. They run [illegible] spindles.

BIRD STREET, 3¼ miles from Boston and 6¾ from Southbridge. A country station in the town of Dorchester, on the Nipmuck River and Boston, Hartford and Erie Railroad.

(For manufacturers see Dorchester.)

BLACKINGTON, 3 miles from North Adams, 36 from Albany, and 43 from Troy. A village of about 300 inhabitants and one church, on the Troy and Boston Railroad.

S. Blackington & Son, manufacturers of [illegible], [illegible] a three story building with basement, 28x40 feet. The business was established in 1822, and carried on by the present proprietors since 1830. They run 14 sets of wooden machinery, and give employment to 22 persons. Their machinery is driven by a 5 ft. turbine wheel of 75 horse power, under 34 feet fall, and a 16 ft. [illegible] wheel with 14 buckets. For heating and boiling purposes they have four tubular boilers, built by Messrs. Campbell, Whitney & Co., of Boston, and A. Lang, of Fitzwilliam, Mass.

BLACKSTONE, 18 miles from Providence, 27 from Worcester, 36 from Boston, on the Providence & Worcester, and Boston, Hartford & Erie Railroads, a manufacturing village containing [illegible] and one bank. Only one manufacturer is located here, one of the oldest and largest in the State.

The Blackstone Manufacturing Co., Incorporated in 1868. John Carter Brown, President; T. P. I. Goddard, Treasurer; H. C. Kimball, Superintendent; Goddard Bros., Selling Agents, 34 South Main street, Providence, R. I. This concern have [illegible] mills, the size as follows: No. 1, [illegible] feet, 3 stories, with an L 100 x 30 feet, 6 stories; No. 2 and 3, [illegible] feet, 3 stories each; No. 4, [illegible] feet, 4 stories; No. 5, [illegible] feet, 4 stories. They supply 1,000 persons, run [illegible] spindles, and 1,[illegible] looms, consuming [illegible] pounds of cotton per month, and producing [illegible] yards of [illegible] cloths and shirtings. The power is furnished

by 3 Boyden wheels, 7½, 5, and 4½ feet in diameter respectively, and four 30 ft. breast wheels, the fall being 32 feet. Seven boilers are used for heating the mills. The gas is brought here from Woonsocket, a distance of 3 miles. The park in front of the mill is tastefully laid out, and shaded by the elm and poplar.

BLEACHERY, 12 miles from North Lawrence, and 1 from the centre and really a part of Lowell, on the Lowell & Lawrence and Boston & Lowell Railroads. The Lowell Bleachery is located here. For sketch see Lowell.

BLEACHERY & CHEMISTRY, two stations 1½ miles apart, in the town of Waltham and about 10 miles from Boston on the Watertown Branch. The Waltham Bleach and Dye Works, belonging to the Boston Manufacturing Company of Waltham, is located here. The following establishments are at the Chemistry Depot:

The Newton Chemical Co. is the second oldest company in Waltham. It was incorporated in 1825, for the manufacture of mineral acids, with a capital of $80,000, H. Moore Agent. The buildings cover 3 acres of ground, the largest of which are two buildings each, 400x25 feet, two stories high. This company employ 100 hands and consume weekly about 100,000 lbs. brimstone and large quantities of salt. They also use about 3,000 tons of coal yearly.

This is said to be the largest acid manufactory in the country. The motive power is furnished by two engines 25-horse power each, built by Otis Tufts of Boston, Mass., for supplying the engines and other part of works with steam, they use 3 flue boilers, one built by Cunningham of Charlestown, and the others by Hinkley and Williams & Otis Tufts, of Boston, Mass.

BOLTON, 43 miles from Boston, and 15½ from Fitchburg, a village and town on the Boston, Clinton & Fitchburg Railroad. This town was incorporated in 1738. It lies between the Concord and Nashua rivers.

BOSTON, 236 miles from New York, (27th street,) via Springfield, 231½ miles via Providence, 201 from Albany, 44 from Worcester 43½ from Providence, 98 from Springfield, 124 from Hartford, 160 from New Haven, 105½ from New London, 464 from Washington, D. C., 105 from Portland, situated on the Massachusetts and the terminus of seven great lines of railways, opening communication with the whole northern hemisphere, wherever the "steam horse" penetrates. Bostou, the capital of the State, was incorporated a city, February 23d, 1822, and originally contained 700 acres, but its territory has been greatly extended by filling up around its borders and embracing its suburbs so that now it consists of four parts: Boston proper, East Boston, South Boston, and Roxbury District. The Indian name was *Shawmut*. It was called by the first settlers Tramount, Tremont, or Trimountaiu, from the three hills nearly in its centre. It took its present name on the 7th September, 1630, in honor of Rev. John Cotton, second minister of the first church, who came from Boston, in England. The original proprietor of this territory was John Blackstone, who soon after its settlement, by Winthrop and others, removed to Rhode Island. Boston proper, occupies a peninsular of 700 acres; the surface is quite uneven, and in three places rises into hills of considerable elevation, the highest being 138 feet above the level of the sea. The State House, located in Boston proper, is in 42° 21′ 22″ N.″ lou., 71° 4′ 9″ W.

Seven bridges connect Boston proper with Charlestown, South Boston and the mainland. The first one built was the Charles River Bridge which is 1,503 feet long leading to Charlestown. The Old Cambridge Bridge, 2,758 feet in length with a causeway of 3,432 feet, extending across Charles River to Cambridge Road, was completed in 1793. The South Boston Bridge 1,550 feet long leading from the Neck to South Boston, was opened in 1805. Canal Bridge 2,796 feet in length, connecting with Lechmere Point. From the centre of this bridge another bridge 1,820 feet in length extends to Charlestown. Boston free bridge, about 500 feet in length, leading to South Boston. Warren Bridge, 1,390 feet long, leading to Charlestown.

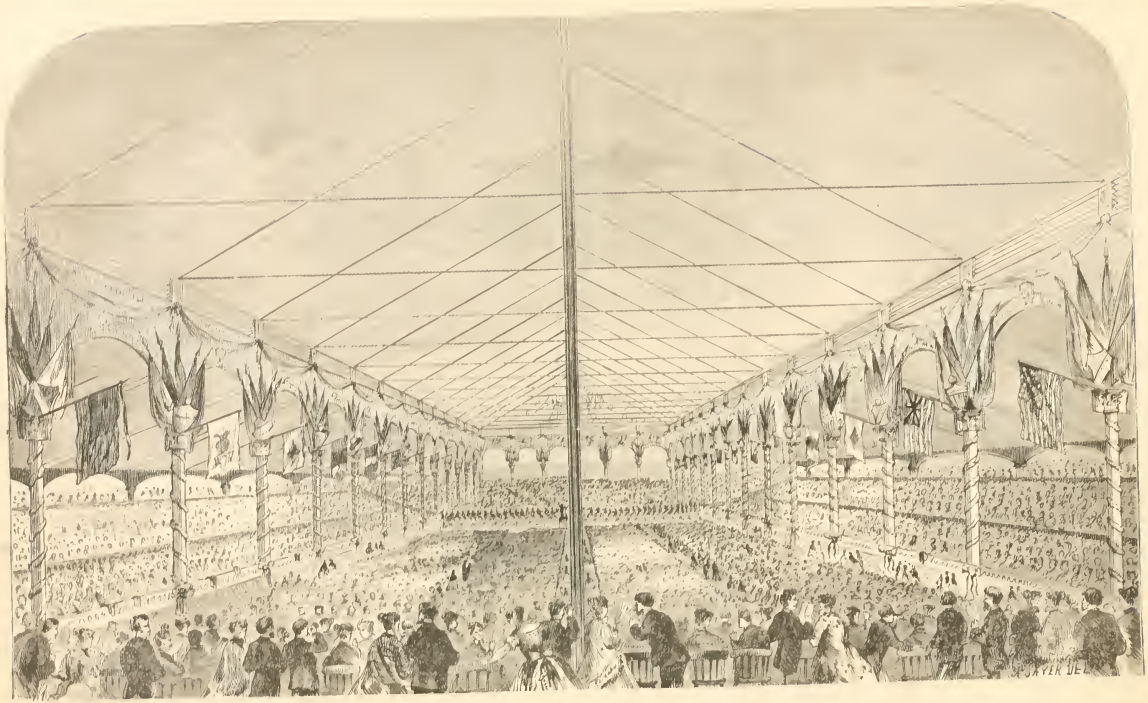
South Boston was set off from Dorchester March 6th, 1804. It is bounded south by Dorchester bay, and spreads about two miles on the south side of the harbor above the forts. It contains about 600 acres and is laid out into regular streets and squares. The surface of this part of Boston is exceedingly picturesque. In about the centre of this part of the city and about two miles from the City Hall, the memorable "Dorchester Heights" rear their heads 130 feet above the sea, from which is presented a splendid view of Boston, its harbor and surroundings.

East Boston was formerly called Noddle's Island. It lies 660 yards Northeast from Old Boston, and about the same distance from Charlestown. It is divided from Chelsea by Chelsea creek, 600 feet wide. The island contains about 660 acres of land and a large body of flats. It was purchased by a company of enterprising gentlemen in 1832. The first house was built in 1833. The surface of the island is pleasingly variegated, and affords delightful sites for private residences, and also well located for manufactories, ship building and all those branches of mechanics connected with navigation. Samuel Maverick formerly owned the island, and resided here in 1630. This locality is now a place of active business,—large ship yards. foundries, machinery manufactories, sugar refineries, &c., being in successful operation. Steamers leave here for Europe.

Roxbury District, formerly the city of Roxbury, became a part of Boston January 6th, 1868. Roxbury was incorporated a town 1630 and chartered a city in 1846. It is joined to Bostou by a neck of land over which are broad and fashionable avenues from 60 to 100 feet wide, and now one of the most fashionable parts of Boston. The surface of Roxbury is rocky and uneven, but of late years the rough aspect has disappeared and elegant mansions are erected, destroying the original barren and sterile aspect. The soil is good and receives profitable cultivation. The first hourly coach from Boston commenced running between the two places in 1827. This was the home of Rev. John Elliott, who settled here in 1632. He learned the Indian language and translated the Scriptures into it. This would seem the business of a life when the sense of the simple expression "Kneeling down to him" is conveyed in the Indian language by Wutappesstukqussunnoowehtunkquoh. This is the birth place of General Joseph Warren, the first officer of rauk that fell in that glorious contest for liberty. He was an able statesman, an eloquent orator; a man of uncompromising integrity and undaunted bravery.

Boston harbor is safe and of ample capacity for the largest navy. The most important part is entered by a narrow pass between two or three miles below the city and navy yard, and is well protected by Forts Independence and Warren.

The outer harbor below the forts is protected by a very powerful fortress, now nearly completed, situated on George's



INTERIOR VIEW OF THE GREAT COLISEUM, ST. JAMES PARK, BOSTON, MASS.

Built for the National Peace Celebration and Musical Festival, held in that city, June 15th, 16th and 17th, 1869.

The Boston Commercial Bulletin,

A Leading American Journal devoted to the

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ENTERTAINMENT, AS WELL AS THE INSTRUCTION

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BRILLIANT SKETCHES BY THE BEST WRITERS,

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IN CLEAR TYPE ON BOOK PAPER,

And in beauty of appearance, is not excelled by any paper in the country. *The Bulletin* has a large and influential circulation, which is not confined to New England, but extends to

EVERY STATE IN THE UNION,

Especially to the large cities and growing towns of the GREAT WEST, which is a valuable consideration

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Island. It has been building some 30 years at a great expense by the United States government.

The harbor contains many islands of great beauty and is the reservoir of the Mystic, Charles, Neponset, Manatiquot and other rivers.

The wharves and warehouses of Boston are built on a scale of magnitude unsurpassed by any city of equal population. The north and east sides of Old Boston are lined with wharves and warehouses substantially built, which taken together, make up an aggregate length of over five miles.

Among the public buildings the State House is the most conspicuous, situated on Beacon street, opposite the Common. Its foundation is 110 feet above the level of the sea. It was commenced in 1795, completed and occupied in 1798, and cost $133,333. It is 173 feet long, by 61 wide, with a dome 52 feet in diameter and 230 feet above the level of the harbor. In 1854 an addition was made for a State Library. From the top of this dome the whole city appears beneath with all of its *crooked streets*, its extended avenues, splendid buildings and the Common crossed by romantic walks and shaded by centurian elms, the harbor and the neighboring cities and villages in the distance, affording a view which is unsurpassed in this country, if not in the world.

The City Hall, or Old State House, on State and Washington streets, is still standing. It is 110x38 feet, 3 stories. Two buildings on this spot have been destroyed by fire. The first was built in 1659, the second in 1714, and the present one in 1748. Faneuil Hall, or the cradle of liberty, in Dock square, is 100x80 feet, 3 stories, and was the gift of Peter Faneuil, Esq., to the town in 1742. The building was enlarged in 1805. The hall is 76 feet square, and 28 feet high, and has deep galleries on 3 sides, and is adorned with paintings of patriots, warriors, and statesmen. *Quincy Market.*—The corner stone of this granite building was laid April 27th, 1825, and completed in 1827. Cost, exclusive of land, $150,000. It is 536x50 feet. The centre part of the building, 74x55, projects 2 or 3 feet on the North and South, and rises 77 feet from the ground to a beautiful dome. The wings are 31 feet and 2 stories high. The lower floor is exclusively appropriated as a meat, fish, and vegetable market. The second for a hall and business purposes. There are several other public markets in this city, besides those of East Boston, South Boston and Roxbury district. The Custom House is near the head of Long wharf, fronting both on Commerce street and on the harbor. It is built on 3,000 piles, at a cost of $1,000,000. The Merchant Exchange, situated on State street, in which is the Post Office, Merchants Exchange and Reading Room, &c. The building was finished in 1842, and cost, exclusive of the ground, $175,000. A new City Hall has recently been erected at a cost of about $60,000, in front of which is placed a statue of Franklin.

The Tremont Temple, situated on Tremont street, opposite Tremont House, was erected on the site of the old one burnt in 1852. The Boston Music Hall, in which is located the "great organ," is situated on Winter street, and was completed in 1852. This organ is one of the most powerful instruments ever constructed. It was built in Germany, at a cost of $60,000. It has nearly 6,000 pipes and 89 stops. Its dimensions are 60x48 feet, and 24 feet deep.

These, with the "the Masonic Hall," the hotels, Tremont, American, Revere, United States and St. James. The theatres, Boston Museum, Boston Theatre, Continental and Selwyn's, comprise the more important public buildings, hotels, theatres, &c. The literary, scientific, educational and benevolent institutions of Boston are numerous.

The Boston Athenæum, incorporated in 1807, situated on Beacon street, own a building costing $136,000, in a lot of ground costing $55,000. The library contains over 50,000 volumes, besides manuscripts, a fine gallery of sculpture and one of paintings. The Massachusetts Historical Society, organized in 1794, has a library of over 12,000 volumes, besides some 500 volumes of manuscript, together with a collection of pamphlets, maps, charts, coins, &c. The Boston Library Society, founded in 1794, has a library of 14,000 volumes. The American Academy of Arts and Sciences has a library of 15,000 volumes, founded in 1780 and is the oldest organization of the kind in the United States, excepting the American Philosophical Society at Philadelphia. The Mercantile Library Association, instituted in 1820, has about 14,000 volumes. The first Mechanics' Apprentices' Library Association ever organized, was established at Boston in 1820. The State Library, founded in 1826, 8,000 volumes, and the City Library, founded in 1851, 10,000 volumes. The Public Library Building, Boylston street, facing the common, was dedicated January 1st, 1858. The cost was $363,633. This library contains over 100,000 volumes and is free to every citizen of Boston.

The Society of Natural History, the building for which is on the "Back Bay Lands," cost $100,000; Also, the Institute of Technology, the edifice for which is in the same locality, cost $100,000. The medical college connected with Harvard University is situated in Boston. There are also many other similar societies all closely identified with the history and progress of Boston, such as the New England Historical and Geneological Society, the Boston Society of Natural History, the American Oriental Society, the Handel & Hayden Society, the Musical Educational Society, and Boston Academy of Music. The Massachusetts General Hospital occupies a plat of four acres of ground in the western part of the city, on the right bank of the Charles River. The McLean Assylum for the Insane, a branch of the hospital is situated at Somerville. The Perkins Institution and Massachusetts Asylum for the Blind occupies the fine building known as the Mount Washington House in South Boston. There is also in South Boston the Boston Lunatic Asylum. The Boston Farm School for indigent boys is located on Thompson's Island. The new Almshouse, an imposing structure in the form of a Latin cross, is situated on Deer Island, where are also the House of Industry and Reformation, and the Quarrantine Hospital.

In the western part of the city is the Boston Eye and Ear Infirmary and in the southern part the New England Female Medical College. The latest and most important, perhaps, of the benevolent institutions of Boston, is the Free City Hospital, built at a cost of $400,000. There are published in Boston about 150 periodical publications, treating of almost every subject, whether of news, art, literature or science. There are 50 banks and 12 savings banks, the former having an aggregate capital of $44,500,000. There are 36 insurance companies. The citizens of Boston have ever sustained a high rank for their commercial enterprise. After whitening every sea with their canvass and extending their commerce with all nations of the globe, they are now looking *westward* and constructing new and artificial channels to enable them not only to compete with other Atlantic cities for the already immense commerce of the western world, but to intercept it on its way down the Hudson and St. Lawrence. Boston Common, the pride of every Bostonian, is considered to be one of the most delightful promenades in the world. It comprises about 75 acres of land of variegated surface, beautifully shaded by trees of various kinds, particularly in the malls or walks which surround it. Some of these trees were planted more than 100 years ago. The malls are wide, beveled, graveled and smooth, the whole enclosed by an iron fence, on the outside of which are wide streets and elegant buildings. The distance around the malls and common is about a mile. This plot of ground is so held by the city, that it can never be appropriated to any other than its present healthful and pleasing purposes. The

Botanic Garden was started in 1837. It is located on the city lands, on the west side of the common. They are a great ornament to the city, and an honor to the taste and judgment of its projectors.

The subject of pure water for all the various uses of life has ever been one of the first and most important considerations with settlers in all countries. It frequently happens that those places most suitable for commerce are the least favorable to the ready acquirement of this indispensable element, consequently the ingenuity and skill of man have devised and executed those stupendous aqueducts, and tanks or reservoirs, both in ancient and modern times, which have made some of the most desolate parts of the globe the greatest marts of trade and most splendid cities. Governor Winthrop and his associates located themselves at Charlestown and would have continued there had not the waters of Shawmut been more agreeable to their tastes. Their change of situation on that account is no compliment to their chemical knowledge, for the waters of Charlestown are decidedly the best. Possibly the "magic of a name" might have influenced them, for *Shawmut* in the Indian language is said to mean "springs of living waters." The City Council in 1844 took the long neglected subject of introducing soft and pure water into the city into consideration. The Boston Aqueduct Corporation commenced operations for conveying water into the city from Jamaica Pond in Roxbury in 179[illegible]. Water is now supplied from the Cochituate lake, situated about 20 miles west of the city and covering an area of 650 acres. Its elevation is 12½ feet above spring tide. The water is conveyed by means of a brick conduit to a grand reservoir in Brookline, and from thence to the different distributing reservoirs. The water is carried over Charles River in two iron pipes, each [illegible] inches in diameter, resting on a granite bridge having three arches, each 40 feet span.

Boston was described by Johnson in his "Wonder Working Providence" about the year 1650, in the following words: "Environed it is with brinish floods, saving one small isthmus which gives free access to the neighboring towns by land, on the south side, on the northwest and northeast. Two constant fairs are kept for daily traffique thereunto. The form of this town is like a *heart* naturally situated for fortifications, having two hills on the frontier part thereof next the sea, the one well fortified on the superficies thereof, with store of great artillery well mounted. The other hath a very strong battery built of whole timber, and filled with earth, at the descent of the hill in the extreme point thereof. Betwixt these two strong arms lies a cove or bay, on which the chief part of this town is built, overtopped with a third hill, all three, like overtopping towers, keep a constant watch to see the approach of foreign dangers, being furnished with a beacon and loud babbling guns, to give notice by their redoubled echo to all the sister towns. The chief edifice of this city like town, is crowded on the sea banks, and wharfed out with great labor and cost; the buildings, beautiful and large, some fairly set forth with brick tile, stone and slate, and orderly placed with comely streets, whose continual enlargement presageth some sumptuous city. But now behold the admirable acts of Christ, at this, His people's landing; the hideous thickets in this place were such that wolves and bears nurst up their young from the eyes of all beholders in those very places where the streets are full of girls and boys, sporting up and down with continued concourse of people. Good store of shipping is here yearly built and some very fair ones. This town is the very mart of the land, Dutch, French and Portugals come here to traffique."

In 1865 the population of Boston was 192,324, and including Roxbury (added in 1868) it has 2[illegible]. In 1863 there were 89,[illegible] males, 108,[illegible] females; 179,[illegible] native; [illegible] foreign; 2,527 colored; [illegible] taxable persons; and in 1868, including Roxbury, [illegible] legal voters [illegible], including Roxbury [illegible].

One of the most important musical events in the history of America and the world, was the holding of a "Great National Celebration of Peace and Musical Festival" in this city on June 15th, 16th and 17th, 1869 to commemorate the restoration of Peace throughout the land. An immense Coliseum, capable of accommodating over 50,000 persons, was erected especially for the occasion at St. James Park. This building is the largest in America under one roof, requiring 1,[illegible] feet of lumber in its construction; the building being 500 x 300, and covering nearly four acres of ground, or about 150,000 feet. There was used in the building of this immense structure [illegible] tons of nails and between four and five tons of other iron work, such as bolts, braces, etc. To cover the roof, so as to make it water proof, [illegible] tons of tarred paper were used. The outside foundations are [illegible] feet and [illegible] inches thick; centre foundations, supporting roof, [illegible] feet square and [illegible] inches thick, all bedded in solid gravel, making in all [illegible] foundation supports. The apex of the roof is 86 feet from top of sill. At a height of 50 feet there are 1,[illegible] feet of continuous windows 5 feet high, all made to run on rollers for ventilation, consisting of [illegible] feet of glass.

In the upright of the building there are 1,[illegible] lights of glass. Ingress and egress are made safe and easy by 12 doorways each 24 feet wide. Judah Sears & Son were the contractors.

The Coliseum was magnificently decorated with historical emblems of State and National progress, arranged for the occasion. A large and powerful organ was built by E. & G. G. Hook, of this city, especially for this Festival. The instrument is one of unsurpassed strength and power, and met with universal favor, filling the mammoth building with sound in the same manner that an ordinary great organ fills a moderate sized church. The builders confined themselves to such features as were absolutely needed, avoiding the occupation of any more space than was positively required for the pipes and mechanism, no attempt being made at display. It has such enormous power that it asserted itself above the united forces of orchestra and chorus, and gave ample facilities for combinations and variations in power and solo effect.

The Festival was inaugurated by the delivery of addresses welcoming all distinguished guests and visitors to Boston and to Massachusetts; also, a congratulatory National address on the restoration of Peace and Union throughout the land, followed by a great chorus of 20,000 voices, accompanied by a grand orchestra of 1,000 musicians, including many bands and best performers in the United States, with the additional effects of artillery and infantry firing, chiming of bells, &c.*

The festival continued on the 16th and 17th and closed with a grand Promenade Entertainment, which afforded an opportunity for an exchange of congratulations and friendly greetings, bringing to a happy close the most imposing musical programme, and one of the grandest national gatherings that has ever adorned the pages of history.

Perhaps at no period since its settlement has the prosperity of Boston been so flattering as for the last year. Its lumber has always been a great [illegible] of a large [illegible] trade, but the great artery to the immense wide spread and rapidly increasing West, is yet to be opened by the completion of the Hoosac Tunnel. By these [illegible] business wisdom, and the enterprise and perseverance of her citizens, Boston cannot fail of sustaining a fair and successful competition for trade with any city on the American continent.

MOTTO OF THE CITY.—*Sicut patribus sit Deus nobis.* As God was with our fathers so may He be with us.

* [illegible]

MANUFACTURERS.

The Dover Stamping Co., manufacturers of Tinner's Hardware, French Tinned Iron Goods, Japanned Ware, Enameled Ware, and every variety of Stamped Goods, whose Ware Rooms are at 88 and 90 North Street, Boston, is one of the few houses whose progress has kept even pace with the times.

Many obstacles have presented themselves—some of them apparently insurmountable—to the attainment of that prominent position in this line of business they had determined to take. Chief among which has been their geographical position.

Most large manufacturing establishments in New England have, sooner or later, planted their Ware Rooms in New York, giving to that city the advantages of their business and prestige of their names, that they might be within easier reach of the trade of the world; thus filching from New England the reputation so much her due, and the influence she should so justly exert.

The Dover Stamping Co. have boldly met the influences thus arrayed against this section, and, through the better quality of their productions and the equalizing of freights, which, from Boston to the West and Southwest are now, for the most part, the same as from New York, and would *always be the same*, if New England manufactures would but remain in New England; have attained as broad a reach and as firm a grasp upon the business of the more distant parts of the country as their ambition could prompt, illustrating the incontrovertible fact that, if the ingenuity and sterling business qualities of New England men were expended upon New England, no market in this country could be more attractive.

The Pioneer of the Dover Stamping Co. was Mr. Horace Whitney, of Dover, New Hampshire, at which place, in 1850, he commenced the stamping business in a very limited way, relying solely upon his own conception of what was wanted by the public, as well as of the means of producing it. A most thorough and experienced mechanic—endowed bountifully with the spirit of progress—he was not long in demonstrating his ability to do wonders in the then *comparatively new art of stamping*. Experiment followed experiment, investment followed investment, until his business had grown to the requirement of Ware Rooms in Boston.

In 1857, he associated with himself, as business partner, Mr. E. D. Goodrich, of Boston, under the firm name of Dover Stamping Co., deriving the name from the location of their works.

For Ten Years Mr. Goodrich's energy, tact, application and sagacity were bent towards the establishment of a Stamping business and the production of Tinners' Hard Ware in New England, to vie in quality and price—with the world.

The goods were manufactured at Dover, under Mr. Whitney's supervision—sent to Boston by rail, and from their old ware rooms at 67 Blackstone street, distributed to their customers.

Rapidly increasing business induced them in 1865, to abandon their rooms in Blackstone street for the more extensive and convenient apartments at 88 & 90 North street, which they now occupy.

For the same reasons a removal of their works from Dover to Cambridgeport was projected.

A site was selected at the corner of Pleasant and Walnut streets, Cambridgeport—which, including the dwellings, occupied by their employees, contained seven acres.

Upon this site they have constructed the various buildings necessary to produce, in the most economical manner, the varied assortment of *French Tinned Iron Goods, Stamped Tin Wares, Tinners' Hard Ware* and *Japanned Wares*; having at the present time, capacity for Three Hundred workmen, with ample room to increase as their business shall demand.

Their motto is "Good Goods," whether costing much or little. A generous recognition of the merits of their manufactures, has made customers for them in nearly all parts of the world—until their business, in amount, is the equal—perhaps superior—of any house in the line in this country.

We look to this establishment to vindicate the claims of Boston to superior constructive ability—and the power to call its business from all parts of the country, and to give therefor the fullest equivalent.

Intellect with experience, is sought throughout our own country and Europe to make up their corps of employees. No expense is spared to combine the best workmen in each department.

Thus equipped, the Dover Stamping Co. is prepared to meet the demands of the trade.

The Piano-Forte Manufactory of Messrs. Chickering & Sons, located on Tremont street, is unquestionably the most perfect and extensive piano manufactory in the world. Considered in this light alone, it is an object of attraction, ornament and pride for our country; but its general interest is doubly heightened by the reflection that its magnitude indicates the rapidly-increasing culture of the "divine art" in this country.

This gigantic structure was put under contract May 16th, 1853. The premises comprise an entire square of 206,000 feet, or about five acres, situated on the westerly side of Tremont, between Camden and Northampton streets. The plan of the building forms a hollow square; the principal front is on Tremont street, and sets back 18 feet from the inside line of the sidewalk; the front measures 245 feet on the street, by 52 feet deep, exclusive of a projection in the centre for the tower, which is of octagon form, 21 feet at the base, and rising to the height of 110 feet.

The north wing, fronting on Northampton street, is 262 feet long by 50 wide. The south wing, fronting on Camden street, is 250 feet long by 50 wide. The westerly front, closing the square, is 60 feet by 70, with wings, each 32 feet wide, connecting the main wings of the building; here are located the steam engine, 125 horse power, built by Otis Tufts, with a Corliss cut-off; six of the largest sized boilers, made by S. E. Chubbuck & Sons, of this city; saw-mills, veneer saws, and veneer-cutting machine.

The main building and wings are separated by fire-proof, vaulted brick walls, two feet thick, with double sets of iron doors, doubly bolted and barred; which, with the facilities at hand for water, render the destruction of more than one building or wing at a time, by fire, next to an impossibility.

The whole edifice stands six stories high on the three streets, the rear, or westerly wing, being three stories. All the rooms are 11 feet in the clear between floor and ceiling, except the front and centre on the second floor, comprising the grand staircase, entrance hall and warerooms, which are 22 feet high, and the staircase 7 feet wide.

Elevators or platforms, 10 feet by 6 (Tuft's new patent,) are operated by steam in each wing, to pass up or down between cellar and attic—thus performing all the necessary moving from one room or story to another in the easiest and most expeditious manner.

The whole of this grand building is devoted exclusively to the manufacture of Pianos, and all the interior arrangements for the business are on a scale to correspond with what has already been described. The rough stock is taken in at the lower door, in one wing, and passing up this wing, through the main building, and down the other wing, is delivered in the warerooms finished—so that almost literally, "forests enter at one end of the building, and come out perfect pianos at the other."

DOVER STAMPING CO.
88 & 90 North Street, BOSTON, Mass.
Manufacturers and Wholesale Dealers in
STAMPED WARES,
AND
TINNERS' TRIMMINGS,
Kitchen Furnishing Goods,
Japanned Wares, Enamelled Wares,
Cast Iron Goods, Stove Shovels,
Can Spouts, Oilers, Dampers
FRENCH TINNED IRON GOODS,
IN FULL VARIETY,
MALLEABLE IRON TRIMMINGS, (Tinned & Plain.)
GAS AND CHARCOAL FIRE-POTS,
TINNERS' TOOLS & MACHINES,
STOVE POLISH, BLACK LEAD,
together constituting an assortment which, in
VARIETY, SIZES AND QUALITY,
IS
UNEQUALED IN THIS COUNTRY

The entire first floor is filled with the requisite machinery, such as planers, lathes, all kinds of saws, moulding machines jointers, &c., &c., and exhibit the finest and largest display of machinery in any one building, occupied as a piano factory, in the world. Every known improvement has been introduced into the various departments of this manufactory, in order to make it and its work as near perfection as human skill, employed with the most ample means, can accomplish.

The space in rear of the factory is used as a lumber yard, and has three large drying houses for seasoning lumber. In this yard and dry houses are kept constantly on hand about 1,500,000 feet of the very best of the different kinds of wood used in the construction of pianos.

No fires of any kind are allowed in this building, either day or night. The entire edifice is heated by steam and lighted by gas. The iron pipe used for steam and gas, if laid out in a single line, would reach a distance of *eleven miles*. In the Case-making and Sounding-board Rooms are immense heating-boxes of cast-iron, inclosed in masonry, lined with steam pipes, capable of raising the temperature to over 200 degrees. The Varnishing Department comprises the entire top floor, extending the whole length of the front and side buildings, a distance of 750 feet.

A private line of telegraph connects the office of the factory with the warerooms on Washington street, a distance of about one mile. A magnetic clock, situated in the private office, notifies Mr. Chickering, in the morning, of any delinquency or carelessness of the night watchman in his duties.

The store-room on the first floor, where the felt, cloth, ivory, screws, hinges, and general assortment of hardware are kept, is quite as large as many of the Broadway retail stores, and the amount of stock and value of it will reach many thousand dollars.

All parts of the business are carried on in this one building. No outside contracts are made, nor are any parts of the piano purchased from other makers or dealers. Each department is governed by a competent and skillful overseer, who is fully responsible to the Messrs. Chickering for all the work done in his branch.

All the scales and patterns are drawn and made by the Messrs. Chickering themselves, and everything, even to the slightest detail, is so thoroughly systematized that the slightest deviation or delinquency of any workman from the regular and authorized course, is known at once by the heads of the firm.

For forty-five years the Chickering Piano has stood first and foremost in this country, ever ready and anxious to adopt every new and valuable improvement, either in the construction, tone, or capacities of the Instrument, but not willing to stoop to any quackeries or humbugs of advertising popularity.

Holmes & Blanchard occupy three five story buildings on Haymarket square, Haverhill, Charlestown and Beverly streets, besides store houses comprising 18,000 feet of floor surface, for the manufacture of burr millstones, portable grinding mills, and machinery of all kinds used in flour, grist, paint and drug mills. They deal in bolting cloth and supplies of all kinds for the above named branches of business. The business was established by Charles W. Brown some twenty years ago. This firm succeeded him in 1861. The number of hands employed varies from 40 to 60, including workers in wood, iron and stone; manufacturing and setting up the machinery when completed, and doing millwright and machine work in all its branches. The work of putting wooden cogs into iron gears is largely done, producing gears that run more smoothly and with less noise than gears of any other description. These gears are rapidly taking the lead in all places where noise is an objection, or perfection of movement is desired.

This firm contract to build flour, grist, paint and drug mills entire, with engine or water wheels. They have furnished mills and machinery for some of the largest white lead and paint manufacturers in the country, including Forest River Lead Co. and Salem Lead Co., of Salem, Mass; Atlantic White Lead Co., Messrs. Hall, Bradley & Co. and Frothingham & Fisher, of New York; Messrs. Harrison, Brothers & Co., and John T. Lewis & Brothers, of Philadelphia; Messrs. T. C. Nevin & Co., of Pittsburg, Pa.; Western White Lead Co., of Chicago; J. H. Morley & Co., of Cleveland, Ohio; Worcester, Liable & Standish, George C. Whitelaw & Co., Southern White Lead Co., St. Louis Lead and Oil Co., St. Louis, and many others. Power is derived from a steam engine of 60 horse power, built by C. H. Brown & Co., of Fitchburg, Mass., with tubular boiler, by Kendall & Davis, of Cambridgeport, Mass. They have capacity for turning out 300 pairs of millstones per year, with other machinery in proportion. Average amount of business 150 to $200,000 per annum, which is yearly increasing. This is the only establishment in New England where the business of building and furnishing mills is done entirely, and where any article in that line can be procured. The convenience to millers and mill owners of such an establishment is evident. This house manufacture also, the Howlands patent hoisting machine and stump puller, a machine that combines in a remarkable degree the quality of lightness and cheapness with a lifting power very far in advance of any arrangement heretofore made. It can be worked by one or more men, and is a great addition to that class of machinery.

The American Tablet Company occupy three floors of a four story granite building, 65x22 feet, located at 29 Brattle street, where they employ about 20 hands in the manufacture of patent erasive tablets and blackboards, for business and school purposes. The blackboards made by this company have stood the test of ten years' constant use, and during the past ten years, in New England alone, have been applied to over two hundred thousand square feet of surface, and in all cases have given entire satisfaction. This company have also secured patents and established factories in England and France, where the sale of their goods have met with great success. They run a 3 horse power caloric engine, built by Butterfield & Havens, of this city.

The Grover & Baker Sewing Machine Co. occupy a five story brick building, 200x65 feet, located at the corner of Washington and Waltham streets, for the manufacture of sewing machines. The business was commenced in 1851, and gives employment to 450 persons, who turn out daily about 150 machines. Their machinery, consisting of 700 power tools, is driven by an engine of 50 horse power, built by the Putnam Machine Co. of Fitchburg, Mass., supplied with steam from a tubular boiler, 50 horse power, built by Mr. Leonard of Somerville, Mass. Their office and salesroom is located at No. 34 Summer street. O. B. Potter is President, William O. Grover, Treasurer and J. B. Wetherell, Superintendent of this company.

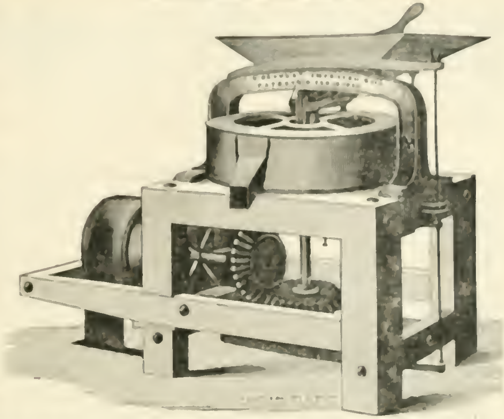
The American Sleigh & Carriage Iron Co., T. W. Porter general agent; occupy rooms 60 x 35 feet, in a five story brick building, located at No. 11 Hawkins street, for the sole manufacture, under patents issued Feb. 13th and June 19th, 1866, of couplings connecting both stiff and limber shafts with the axle, or with sleighs, the perches of all kinds of underworks with the axle and rocker, the cross bar with the shafts of sleighs and carriages, the standards of sleighs with the runners and bars, the curved end of light poles formed hollow of iron, and the standards of hand-sleds formed to receive the runner, bars and fender rail, obviat-

HOLMES & BLANCHARD,

MANUFACTURERS AND DEALERS IN

Sole Manufacturers of Howland's Patent Stump Puller, by the use of which one or two men can extract the largest Stumps. Invaluable to the Farmer, who has land to clear, or heavy wall to build. Two sizes. Price, $50 and $80.

Flour or Grist Mills contracted for entire, if desired, with Engine or Water Wheel.



Sole Manufacturers of Howland's Patent Hoisting Apparatus, by which one man can easily raise or lower a weight of one or two tons [illegible] at any point. Price $40.

Sole Agents for Dryden's Self Oilers, for Oiling Automatically the Journals of Machinery, saving from 75 to 90 per cent of oil.

FRENCH BURR MILLSTONES,

AND MILL GEARING OF ALL DESCRIPTIONS.

MANUFACTURERS OF

IMPROVED PORTABLE MILLS,

Of all sizes, for Grinding Grain, Salt, Coal, Spices, Coffee, Plaster, &c.

MACHINERY of all kinds for FLOUR and GRIST MILLS, and Mill Furnishings of every description.

DUTCH "ANKER" BOLTING CLOTHS.

Mill Picks, Spindles, Steps, Bushes, Bails and Drivers, Smut Machines and Separators, Bran Dusters, Flour Packers, Screw and Belt Reels, Shafting, Pulleys and Hangers, Hoisting Screws and Bails, Corn and Cob Crackers, Screen Wire, &c.

BEST OAK TANNED LEATHER BELTING CONSTANTLY IN STOCK, AT MANUFACTURERS' PRICES.

FRENCH BURR POWER PAINT MILLS, for Grinding in Oil, Double and Single.

Paint Mills, Mixers, and all kinds of Machinery used in the manufacture of Paints and Colors. Lac Dye Cleaners, Dye Wood Cutters, and Machinery for pulverizing Cochineal and all Drugs. Machinery for Breaking and Grinding Bones, Plaster, Barytes, and other minerals.

Sole Manufacturers of A. H. Brainard's Improved Iron Power Paint Mills

For Manufacturers, and Brainard's Hand Paint Mills for Painters, [illegible] various sizes.

Platform Elevators, for Stores & Warehouses. Improved Turbine Water Wheels.

OFFICE AND SALESROOM, 6 Haymarket Sq., and 2 Charlestown Street.

Shops, Nos. 9 & 11 Haverhill, 2 Beverly, and 4, 6 & 8 Charlestown Streets.

E. D. HOLMES,
JOHN W. BLANCHARD, JR.

BOSTON, MASS.

FOBES, HAYWARD & CO.,

Manufacturers and Wholesale Dealers in

CONFECTIONERY,

CHOCOLATE, SUGAR TOYS, &c.

DANIEL FOBES,
D. H. HAYWARD,
A. F. HAYWARD.

NOS. 96 & 98 SUDBURY STREET, BOSTON.

ing all mortices and tenons, or bolt holes in the axles and stock, and the necessity of removing the bent ends of shafts in case of repairs, as the shaft is formed in two parts, meeting at the cross bar — producing a stronger, neater and cheaper vehicle than by any other method. Mr. Porter is also sole proprietor and manufacturer of Pierce's Spiral Common Sense Egg Beater, of which he turns out 12,000 per week, and the Triumph Pie Lifter, of which he turns out 6,000 per week.

FOBES, HAYWARD & CO. occupy a five story brick building, 80x34 feet, located at Nos. 96 and 98 Sudbury street, for the manufacture of confectionery and chocolate of every description. They commenced business in 1861, have from 25 to 30 employees, consume from 40 to 50 barrels of sugar per week and do business amounting to upwards of $100,000 per annum. Their machinery is driven by a 15 horse power engine, built by R. W. Pratt & Co., of this city, with one tubular boiler, 40 horse power, built by Kendall & Roberts, of Campridgeport, Mass.

W. FRANK BACON occupies 2 floors, 65x35 feet, in a three story wooden building, located at No. 33 Hawkins street, where he employs 17 hands in the manufacture of gold leaf, gold foil, bronze, and dentists' plate. He commenced business in 1841, and has a capacity for turning out 250 packages per week, each package containing 500 sheets. Does business to the amount of $30,000 per annum.

SCRANNAGE, BATE & CO. occupy a foundry 45 x 45 feet, located at No. 138 Broad street; also occupy 2 floors 50x20 feet in a four story brick building, located at No. 50 Sudbury street, where they manufacture soda and beer generating apparatus, fire extinguishers and plumbers' brass work of every description, turning out each month 3,500 lbs of finished castings, and giving employment to 25 hands. Their machinery consisting of 17 lathes, strapping and brushing machines, &c.; is driven by an engine of 90 horse power in building adjacent. Do business to the amount of $40,000 per annum.

THE BAY STATE PAPER BOX FACTORY, George B. Harrington proprietor, occupies four floors 100x30 feet, in a five

W. FRANK BACON,

MANUFACTURER OF

Gold Leaf, Bronze, Gold Foil & Dentists' Plate,

No. 33 Hawkins Street, (Near Sudbury Street,)

Refining done at short notice. **BOSTON.**

story freestone building, located at 105 Hanover street, for the manufacture of every description of plain and fancy paper boxes. He commenced business in 1859, has 60 employees, and consumes about 200 tons of straw board annually.

WM. F. SCHRAFFT occupies a 4 story brick building, 40x 25 feet, located at No. 11 Elm street, for the manufacture of French and American confectionery, of the best quality and free from adulteration. He commenced business in 1862, has 12 employees, consumes from 15 to 20 barrels of sugar per week, and does business amounting to about $60,000 per annum.

WILLIAM F. SCHRAFFT,

Manufacturer and Wholesale Dealer in

American & French Confectionery.

NO. 11 ELM STREET, BOSTON, MASS.

E. & G. G. HOOK,

Church Organ

BUILDERS, BOSTON.

E. HOOK,
G. G. HOOK,
F. H. HASTINGS.

Small Organs constantly on hand, completed or nearly so, suitable for Small Churches, Halls, or Lecture-Rooms.

Also, an assortment of Second-hand Organs for sale at low prices.

ORDERS FOR TUNING AND REPAIRING PROMPTLY EXECUTED.

Messrs. E. & G. G. Hook, Boston, Mass.

GENTS: It gives me great pleasure to express my admiration for the [illegible] Organ which you placed in Plymouth Church. It has given the utmost satisfaction. For myself I was well pleased from the first, yet every week my pleasure is renewed and my appreciation of its noble qualities deepens. I shall always be grateful to you for this tower of love, as I am sure it was as well as great skill, and shall count that church happy that secures your instruments.

I am truly yours,

Henry Ward Beecher.

1131

Tremont St.

ROXBURY DISTRICT.

Specifications, endorsed by the best Organists, and Circulars, containing valuable information, will be furnished upon application.

All instruments are warranted perfect in every respect.

The SMALLEST are equally as perfect in tone, construction and durability as those of the largest size.

AMONG other establishments that make Boston famous as a manufacturing city, is the well known church organ manufactory of Messrs. E. & G. G. Hook, 1131 Tremont street. This firm have the largest establishment of its kind in the country. It comprises a 4 story factory, 200 x 80 feet, with accessory buildings, comprising ample dry houses for lumber and other conveniences. Besides rooms for the various departments, the main building includes two spacious finishing and exhibition halls. Employment is here given to over 100 accomplished workmen, comprising the best talent and skill that can be obtained. The Messrs. Hook combine in their art all improvements peculiar to the English, French, and German methods, and their instruments are not excelled, rarely equalled, in any country. They have been in business over 40 years, furnishing organs for all parts of the country from Halifax to San Francisco. A majority of the large organs have been produced by this firm, including the six largest and most complete ever built in America, one of which is the large and powerful organ for the Coliseum used at the National Peace Jubilee. The instrument is one of unsurpassed strength and power and met with universal favor, filling the monsoon building with sound in the same manner that an ordinary great organ fills a moderate sized church. The builders confined themselves to such features as were absolutely needed, avoiding the occupation of any extra space that was positively required for the pipes and mechanism, no attempt being made at display. It had such enormous power that it asserted itself above the united forces of orchestra and chorus, and gave ample facilities for combinations and variations in power and sole effect. Their annual production is about 70 organs, varying from $1,000 to $25,000 each in price, and aggregating from $[illegible] to $[illegible]. Their business is steadily increasing, and new additions to their already extensive facilities are contemplated.

C. L. THIERY occupies 2 rooms, 60 x 30 feet each, in a 5 story brick building, located at 151 Washington street and No. 7 Howard place, where he manufactures watch cases, of all descriptions, and does plating in gold and silver. He commenced business in 1847; has 20 employees, and does business to the amount of $[illegible] per annum. His machinery is driven by an engine of 30 horse power, in building adjacent.

C. L. THIERY,

Manufacturer of all descriptions of

Watch Cases; Gold & Silver Plater.

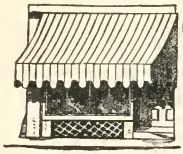
Engine-Turning, Polishing, Springing and Repairing of All Kinds.

No. 151 Washington St. & 7 Harvard Place. **Office 151 Washington St., Boston.**

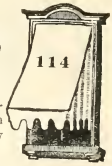
N. B.—Cash paid for old Gold and Silver.

JAMES MARTIN & SON,

—Manufacturers of—



TENTS, WAGON & HORSE COVERS,



FLAGS, ITALIAN AND STORE AWNINGS.

We have several large TENTS, that will seat from 700 to 4,000 persons to dine under, which with about 100 smaller Tents we will LET on reasonable terms. All letters promptly answered and all orders personally attended to.

JAMES MARTIN & SON,

114 Commercial Street - - - - - - - - - - - - - - - Boston, Mass.

JAMES MARTIN. JAMES A. MARTIN.

James Martin & Son occupy 3 floors, 60x20 feet, in a 4 story brick building, located at No. 114 Commercial street, for the manufacture of circus and show tents, awnings, and awning fixtures, flags, &c. They commenced business in 1837. Consume about 50,000 yards of cotton drilling per month; employing on an average 10 hands. This firm also have on hand a variety of tents of all sizes, capable of holding from 150 to 4,000 persons, which they will let for fairs, picnics, public celebrations, &c., on reasonable terms.

The Bay State Sugar Refinery, R. H. Waters & Co., proprietors, was established in April, 1867. They occupy a five story brick building, located at Nos. 8, 9 and 10 Sargent's wharf, and from No. 41 to 49 Eastern avenue, and manufacture granulated and coffee sugars. The first floor of their building contains an engine for driving their machinery, 60 horse power, with an automatic cut-off, built by George Davis & Co., of Nashua, N. H., and a vacuum engine of 25 horse power, used for exhausting the air from the vacuum pans, built by the same parties. Their steam is furnished from four tubular boilers, with Miller's connections, built by John Lally, of this city. They also have four steam feed pumps, built by George F. Blake & Co., of this city. Aside from these and on the same floor, is a melting-pan, capable of holding 700 gallons, 4 charcoal kilns, forty pipes in each kiln, and ample room for storing and shipping their sugar. On the second floor there are 10 centrifugal machines, used for purging sugar, capable of turning out 800 barrels per day; also 4 green syrup tanks, holding 3,240 gallons each, 3 tanks for boiling liquors, holding 3,240 gallons each, 18 charcoal filters, 4 feet diameter, 30 feet long, holding 16,000 pounds each. There is a railway on this floor for conveying the charcoal from the kilns to the filters; also a machine for cooling it after being taken from the kilns, which cools 300 barrels per day, and 2 syrup tanks, holding 100 barrels each. On the third floor there are 2 receiving tanks, holding 2,800 gallons, which receives the liquor from the bag-filters, 3 tanks for boiling purposes, holding 3,240 gallons each, 100 cooling wagons, holding 1,800 barrels, also a tank and mover combined, 11 feet long, $7\frac{1}{2}$ feet arch, for receiving the sugar from the vacuum pan, to supply the centrifugal machines used for purging the sugars. On this floor, and separated by a brick partition, is the granulating machine and an elevator for hoisting. On the fourth floor is the vacuum pan, used for boiling sugar, $9\frac{1}{2}$ feet diameter, and containing 407 feet of 4-inch copper pipe. There are also 6 bag filters, holding 63 bags each, and an elevator used for hoisting charcoal from the cellar to the fifth floor. Here is the clarifying room, containing 6 clarifiers, each holding 1,600 gallons of liquor, and 2 receiving tanks, with cold and hot water at hand. This firm employ 45 hands, and produce about 250 barrels of sugar daily.

Joseph R. Grose occupies two floors, 90x46 feet, in a five story brick building, located at No. 109 Court street, where he manufactures paper boxes of every description. He commenced business in 1858, has 19 employees and does business amounting to from $25,000 to $30,000 per annum. The machinery is driven by a 5 horse power steam engine, supplied with steam from a tubular boiler, 8 horse power, built by Allen & Endicott, of Cambridgeport, Mass.

C. J. Peters & Son occupy rooms 100 x 45 feet, in a four story brick building, located at from Nos. 1 to 13 Washington street, where they manufacture stereotype and electrotype plates, giving employment to 20 persons. They commenced business in 1864, and consume between 30 and 40 tons of lead and copper, doing business to the amount of $50,000 per annum. Power furnished from engine in building adjacent.

JOSEPH R. GROSE

MANUFACTURER OF ALL KINDS OF

PAPER BOXES,

No. 109 Court Street, (Minot's Building.)

Up Stairs.
A few doors from Hanover Street.

BOSTON.

C. J. PETERS & SON,

STEREOTYPERS AND ELECTROTYPERS,

Nos. 5 and 13 Washington St (Entrance No. 5.) Boston, Mass.

Book and Job Work of every description, executed in the best style of the art, and with despatch. Particular attention given to electrotyping advertisements and wood cuts for newspapers; also, Labels in Colors; Speed Tickets, &c. Orders respectfully solicited.

H. B. & W. O. Chamberlain's philosophical and chemical establishment, Nos. 110 and 112 Washington street, originated with N. B. Chamberlain, father of the present firm, in 1837. One small room, at No. 9 School street, constituted the manufactory and warerooms. Most of the little capital employed in the prosecution of the quite limited business was mechanical skill, industry and integrity. As the natural sciences were then taught and illustrated by experiments only in the colleges, the demand for philosophical instruments and school apparatus was very limited. But the introduction of instruments for illustration soon brought the study of natural philosophy and chemistry into favorable notice, and ten years produced a great change in the demand and supply. The small shop was enlarged, and increased demand gave steady employment to several more skillful workmen.

Mr. Chamberlain's sons pursued their studies to completion, graduated with honor, from the Boston high school, entered the work shop as "shop boys" and apprentices, continued their labors and studies industriously for several years, until "old age," came in as partners, under the firm of N. B. Chamberlain & Sons; because not only manufacturers and sellers, but skillful and scientific manipulators and demonstrators, with an almost unrivalable variety of instruments, illustrating nearly every branch of physical science. Such was the progress and attainments, and with the excellency and perfection of the various instruments and machines manufactured, as to secure not only a ready sale to scientific and literary institutions, but the highest awards in diplomas and gold and silver medals. The honorary degree of Master of Arts was conferred upon N. B. Chamberlain by the curators of Amherst College.

N. B. Chamberlain retired from the firm in 1863, to give his time and philosophical skill exclusively to instructing in the use of philosophical and chemical instruments, and public lecturing. The new firm required more room to accommodate the proposed enlargement of business by importation, and the new and convenient store, 30 feet front, 125 deep, and 4 stories high, on Washington street, had this year been completed.

The basement is conveniently fitted for storing in a well assorted manner, the large variety of glass ware for chemical manipulations and illustrations. On the first floor are two well fitted up and well filled show windows, the rather wide front to rear, and glazed show cases and drawers. A row of elegantly finished show-cases stand right and left the entire length of the store, making a grand display of costly and elegant philosophical ware.

The second story front room is commodiously fitted up as a business office, with desks, safes, &c. The room adjoining is one hundred feet deep and fitted on both sides with plate glass show-cases well filled with a large assortment of home manufactured and imported philosophical and chemical apparatus, while the two stories above are devoted to storing a large stock of instruments for use in common schools and academies. All the premises referred to, are warmed by eight tanks of steam pipes, and the whole premises are lighted with gas chandeliers. In the rear and entirely independent of the store, as a building, is the manufactory, with machinery driven by a twelve horse power steam engine, the boiler of which supplies steam for heating the whole store. No branch of business employs workmen upon so great a variety of mechanical operations and working at so many hundreds different machines. A short stay in this very busy establishment will persuade the observer that only a practically scientific man could superintend such an establishment to advantages. The pen and pencil have also been brought into requisition and contributed much to promote the interest of business by publishing elaborate and finely illustrated catalogues. One of the firm has visited most of the philosophical establishments in Europe, and selected to peruse a large stock of chemical ware and magnetic instruments, and arranged with several manufacturers for a continued supply of the most modern and improved instruments of their production.

The new store, with a larger stock of goods by importation, is attracting, as it should, a generous patronage.

William Jessop & Sons, manufacture every kind of steel, having their manufactory in Sheffield, England. They keep on hand the largest stock of any house in the United States, and receive accessions to their stock by every steamer. They have sole control of their celebrated iron, which stands at the head of all iron for steel making purposes; have for some years been the largest consumers of the finest brands of Norway and Swedish iron; have special facilities for the manufacturing of circular plates of all sizes up to 84 inches, and of extraordinary accuracy of shape also of every kind of sheet steel, producing nearly 700 tons of pure steel every year. For fine steel for tools, &c., their manufactory is the largest in the world. The Brightside works cover an area of about 25 acres, in which are employed several steam engines of great power, heavy Nasmyth hammers, rolling mills, forges, melting and refining furnaces, and all the appliances required for the manufacture of steel of the finest quality. The Park Works contain furnaces, and the office of the firm. The Soho works contain rolling mills, grinding mills and for the finest steel. All the works are connected with the office by a private telegraph. They produce about 125 tons of fine cast steel per week. They have agencies in New York, Philadelphia, St. Louis, Cincinnati, Chicago, Montreal and Boston, where, at the latter place, it has been in existence over 20 years.

Hatsell, Davis & Co., manufacturers of parlor grand and square piano-fortes, established business more than 21 years ago. Their building is situated on the east side of Harrison avenue, near Franklin sq., between Camden and Brookline streets. It has a front of 205 feet on Harrison avenue with wings, each 100 feet, fronting on Camden and Brookline sts. It is six stories high, besides the "Lowrie roof," which is two stories, the whole 100 feet high above the side walk. The building forms three sides of a square, in the centre of which the two story building, 40x60 feet, independent of the main building, the lower story of which is used as a boiler room, and for drying coal; and the upper story as a drying room for drying lumber. In the rear of the building is a yard 205 feet long by 100 feet wide, for the storage of lumber; the whole lot containing 40,000 square feet, or nearly one acre of ground, and the whole surrounded by a wide public street. The main building is divided into distinct parts by two brick partition walls with iron doors on each floor, each part being 100 feet long and 50 feet wide. It will give

GEORGE B. LOTHROP & Co.,

LOCKSMITHS,

AND MANUFACTURERS OF

BUILDERS' HARDWARE.

No. 30 Exchange Street, (Corner Dock Square.) **BOSTON.**

a better idea of the magnitude of these buildings to say that they contain 111,576 feet, or about 2½ acres of flooring, and 371 windows, containing 4,100 lights of glass. Steam is used for heating the whole building and drying lumber. There are two fire-proof safes large enough to contain duplicates of all patterns and scales used about the business. There are three brick cisterns in the basement, with a united capacity of about 66,000 gallons, designed to retain the rain water used in the factory. The motive power for the machinery department is obtained from an upright double cylinder, 40 horse power engine. They possess facilities for turning out between 50 and 60 pianos per week. Their engine and elevator was built and put up by Campbell, Whittier & Co. The steam pipes by J. J. Walworth & Co., and the boilers by McKay & Aldus, all of this city. The warerooms of the firm are at No. 272 Washington street.

George B. Lothrop & Co. occupy two floors 15x70 feet and 20x10 feet respectively, in a six story brick building, located at No. 30 Exchange street, where they employ 12 persons in the manufacture of builders' hardware, having been engaged in this business since 1866. Their machinery is driven by an engine of 5 horse power supplied with steam from a tubular boiler, both of which were built by Allen & Endicott of Cambridgeport, Mass. They do business amounting to $20,000 per annum.

Braman, Shaw & Co., successors to Foster, Lawrence & Co., established in 1830. Manufacturers of all kinds of upholstered parlor furniture, sales room and finishing shop, 27 Sudbury, corner Portland street, Boston, Massachusetts. Their factory on Bridge street, East Cambridge, is 125 x 50 feet, four stories high, well supplied with the latest and most approved machinery for the manufacture of first-class furniture; two large kilns for drying lumber. Their factory is situated on a solid wharf, containing 20,000 feet, with water on two sides of sufficent depth to allow good sized vessels to land; employ about 250 hands. This firm import direct from the manufacturers, Samuel Laycock & Sons, best English hair cloth; for durability and finish this cloth is greatly superior to any other in the market.

Messrs. Braman, Shaw & Co. manufacture elegant parlor suits, in every variety of style and finish; also, sofas, lounges, parlor easy and reclining chairs. Settees and chairs for masonic lodges, churches, depots, halls, &c., &c., made to order. They sell to dealers throughout New England, New York and the West, and ship to California, Oregon and Australia. They have in their employ about 250 hands. An engine of 40 horse power drives their machinery.

E. F. Page & Co. occupy 4 floors 75x30 feet, in a 6 story stone building, located at No. 46 Congress street, where they employ 8 hands in the manufacture of superior oak tanned leather belting. The business was established in 1847 by Edward Page, and succeeded by E. F. Page & Co., at their present location in Jan. 1867. Their machinery, consisting of glassing and splitting machines, is driven by an engine of 25 horse power in building adjacent. They do business amounting to upwards of $100,000 per annum.

Boston Print Works, Birkmaier & Burns, proprietors, occupy four floors, 75x30 feet, in a five story stone building, located at No. 65 Congress street, for the printing of woolen goods, and sponging of all kinds of fabrics, the colors used being made in the same building. The business was established in 1860, and gives employment to 22 persons. They have a capacity for printing four cases of goods per day, each case containing 600 yards, which pass through the printing machine three times. Their machinery is driven by two steam engines of 12 horse power combined, built by Otis Tufts, of this city. They do business amounting to $26,000 per annum.

The firm of Sewall, Day & Co., was originated in the the year 1835, by Benjamin Sewall and Moses Day, owing to whose skill and energy, the production of the establishment has increased from about 300 to more than 2,500 tons per annum, making them the largest manufacturers of cordage in the New England States. The machinery used by them is mainly constructed in the shop upon their own premises; and they have also manufactured machinery for other rope factories. In addition to cordage, they make oakum packing, bale rope, lines of all kinds, &c. They have in their employ 250 operatives, and their gross sales amount to about $1,250,000 per annum. Mr. Day is a practical rope maker, and has been interested in the business for more than sixty years.

The Bickford Knitting Machine Co. was incorporated in 1868, with a capital of $250,000. They occupy two rooms 30x60 feet each, in a four story brick building, located at No. 332 Washington street, where they employ 35 hands in the manufacture of knitting machines, of which they turn out 100 per week. The business was established by Dana Bickford, in 1867. They claim this machine to be the best and most simple in its construction, and the lightest and most portable ever yet invented. It will knit 15,000 stitches, or 18 inches of perfect work, in a minute. This company also manufacture the Bickford family spinner, a companion to the knitting machine, and one of the most complete and desirable machines ever introduced for spinning purposes. Their office and salesroom is at 52 Bromfield street. Dana Bickford is president; Smith B. Harrington, secretary, and Charles O. Crane, treasurer, of this company.

LONDON, 1851.

WM. BOND & SON,

17 CONGRESS STREET,

BOSTON, MASS.

PARIS, 1867.

MANUFACTURERS AND IMPORTERS

OF

FINE WATCHES AND CHRONOMETERS.

William Bond & Son, chronometer and watch makers, are the only manufacturers of chronometers in Boston, and the firm is the oldest in that business in America; for after an existence in England of several generations, it was moved to this country, by Wm. Bond in 1793, and in 1793 was permanently located in Boston, where it is now represented by the fourth generation. Their premises consist of the brick building No. 17 Congress street, containing 3 rooms, and a large well-lighted workshop in the attic. Their present number of employes in the building is about 12, besides several outside workmen, who are engaged on piece work. They manufacture astronomical clocks, chronographs, marine and sidereal chronometers and watches. Their astronomical instruments are probably the best in the world, embodying important improvements and inventions of their own. That their reputation is not confined to this country is shown by the fact that they have supplied the observatories of Liverpool, England, and the Cape of Good Hope, besides most of the observatories of the United States, and also the naval, topographical and coast survey departments of the United States government. Their principal attention, however, is given to the manufacturing of marine chronometers. As the safety of a ship frequently depends upon the accuracy of her chronometer, no trouble or expense is spared to bring them to perfection, and the reputation of the Bond & Son chronometers is proof of their success. Among their appliances for testing these instruments is an automatic oven of their own invention, which regulates itself with such delicacy, that its heat never raises a degree from the required temperature. In 1812, the late Prof. Wm. C. Bond then a member of the firm, made with his own hands the first chronometer ever manufactured in America, and sent it on a trial voyage to the East Indies, in a naval vessel. Its performance was very satisfactory, and the old chronometer, still in the possession of the firm, attracts much attention by the contrast it offers to their more modern instruments. Messrs. William Bond & Son have seldom exhibited their instruments in competition, but whenever they have done so, they have invariably received high awards. In 1851 at the world's fair in London they received one of the 12 grand council medals awarded to this country; in 1856 and 1860 they received gold and silver medals from the Massachusetts Charitable Mechanic Association, and in 1867 a silver medal at Paris, these being in each case, the highest prizes awarded in their department.

E. T. Cowdrey & Co. commenced the manufacture of vinegar, at 29 and 31 Eastern avenue, in 1858, and in 1858 added the manufacture of pickles, preserves, &c. In February, 1861, their occupying three stores, they were burned out, having on hand a stock of $27,000, and being insured for only $5,000. They commenced again May 1st at their present location, 27 to 37 Portland street. They occupy two buildings or stores, each about 100x30 feet, and five stories high.

The number of employes vary at different parts of the season. In August, September, and October, they have from 20 to 30 men and from 100 to 150 girls. During the balance of the season, will average about 10 men and from 15 to 20 girls. Tomatoes, pickles and horse radish are made a specialty. Of tomatoes they put up some 12,000 bushels, filling them into five different sized cans, viz.: 2 gallons, 1 gallon, ½ gallon, 3 pounds, and 2 pounds; and making about 10,000 gallons tomato ketchup. Of pickles 600 to 800 bbls. is a fair stock annually. They commence putting up horse radish in October, and continue till the following June, packing about 40 tons. Their engine and boiler were built by Allen & Endicott of Cambridgeport. Their engine is rated 12 horse power and the boiler 8 horse power. The business was established by E. T. Cowdrey, who is now sole proprietor.

L. C. Chase & Co. occupy a 4-story brick building, 75x50 feet, located at Nos. 36, 38 and 40 Sudbury street, where they employ 40 hands in the manufacture of woolen and horse blankets, of which they turn out 600 per week, and do business amounting to $300,000 per annum. This firm are agents for the New Hampshire blankets, and are also dealers in carriage blankets and robes.

John Peak & Son occupy one floor of a 2 story brick building, 80x70, located at the corner of Merrimac and Lancaster streets, for the manufacture of coffins and caskets, of every description. Also occupy as their office, salesrooms and finishing rooms, a 3 story brick building, 70x20, located at No. 10 Friend street. They commenced business in 1860. Have 15 employes, turn out about 2,000 coffins per annum, and do business amounting to $40,000.

H. A. Hutchins & Co. commenced business in 1866. They occupy 4 floors, 18x75 feet, located 97 Blackstone st., and employ 10 hands in manufacturing house-furnishing goods, the most prominent of which are Hutchins's patent stove scoop and sifter, the corrugated stove broiler (patented by the firm,) Johnson's patent magnetic carpet stretcher and tack driver, patent pie lifters, Adams', Whitmore's and Pratt's patent closed sifters, iron sink cedar, &c., &c., consuming about 50,000 pounds of iron and brass wire annually.

Haskell & Edmands occupy the third floor, 90x20 feet, of a four story brick building, located at No. 3 Province court, for the manufacture of steam and fire appliances of every description. They commenced business in July, 1868, and have seven employes.

JOHN CLARKE,

Manufacturer of

Bedsteads, Bureaus, Commodes, Dressing Glass Frames & Sideboards.

FACTORY, 146 PORTLAND STREET AND 93 MERRIMAC STREET,

Warerooms, 52 and 54 Pitts St., Boston.

[illegible] M. Stevens & Co. occupy the fourth floor of a [illegible] story brick building 7[illegible] feet, located at No. 9[illegible] Sudbury street for the manufacture of tower clocks. They commenced business in 18[illegible], and have [illegible] employees. This firm are now building and have nearly finished [illegible] of these clocks, varying in price from $200 to upwards of $[illegible] each.

[illegible] T. McLauthlin & Co., iron building, 120 Fulton street, manufacturers of steam engines, water wheels, fire proof safes and general machinery to the extent of about $[illegible] worth a year, employing some 5[illegible] men, with 3[illegible] lathes, planers, drills and other power tools embracing several large and heavy machines. Their factory is a large and magnificent five story structure, built expressly for the business. They occupy the basement, first and second floors, making over [illegible] an acre of floor room, and lease the balance for other manufacturing purposes. Their engine is a first-class horizontal, of [illegible] horse power, fitted with Reynolds regulating cut-off valve.

Mr. McLauthlin commenced business about 2[illegible] years since at the age of 2[illegible], in the pilgrim town of Marshfield.

Richardson & Lehnert occupy 2 rooms [illegible] feet, in a [illegible] story brick building located at No. 4[illegible] Portland street, for the manufacture of musical instruments, also gongs and cymbals, of which they are the only manufacturers in the country. They commenced business in [illegible] and have [illegible] employees.

[illegible] occupies three wooden buildings, the main building being [illegible] feet and two stories, with an [illegible] 3[illegible] feet square. Also a store room and varnish shop and blacksmith shop, each [illegible] feet, located at the foot of [illegible] street. He commenced business in 18[illegible], has 2[illegible] employees and manufactures first class carriages of every description, doing business to the amount of $[illegible] per annum.

[illegible] & Hamblet occupy two rooms 6[illegible] feet, in a four story freestone building located at No. 4[illegible] Hanover st., for the manufacture of patent electro magnetic watch clocks for factories, fire alarm offices, &c. Also telegraph gauges, electric clocks and magnetic electric alphabetical dial telegraph instruments for private business offices and railroad uses. This firm were awarded a gold medal for indicator for dial telegraph and for watch clocks, exhibited by them at the third exhibition of the Middlesex Mechanics' Association in 18[illegible]. Also a gold medal from the Massachusetts Charitable Association at their tenth exhibition in September, 18[illegible].

They commenced business in 18[illegible] and have [illegible] employees. Their machinery is driven by an engine of 9[illegible] horse power in building adjacent.

Elliott B. Morse occupies one floor of a five story building [illegible]x6[illegible] feet, as a manufactory, also two rooms 6[illegible] feet for an office and salesroom, located at 7[illegible] and 7[illegible] Sudbury street, where they manufacture fire and burglar proof safes and bank locks. He commenced business [illegible], 18[illegible], and has [illegible] employees.

[illegible] & [illegible] occupy a [illegible] story brick building 2[illegible] feet, located at Nos. [illegible] and [illegible] Blackstone street, for the manufacture of preserves, pickles, ketchups and hermetically sealed fruits, vegetables, &c. They commenced business in February, 1866, and have 15 employees.

John Clarke occupies two floors, 25x100 feet each, in a three story wooden building located at No. 146 Portland, and 93 Merrimac streets for the manufacture of chestnut and black walnut chamber furniture and side-boards, also dressing-glass frames, made from walnut, chestnut, mahogany and pine. He commenced business in 1867 and employs [illegible] persons. The machinery consisting of 2 jig and 5 bench saws, 1 boring and 1 irregular moulding machine, is driven by an engine located in an adjacent building. His finishing and warerooms are at Nos. 52 and 54 Pitts street.

Perrie, Drew & Co. occupy the lower floor of a 5 story building 75x25 feet, located at Nos. 52 and 56 Sudbury st., for the manufacture of wrought iron steam and gas pipe, brass and iron fittings, gas lighting apparatus, &c. They commenced business in 1867, and have 12 employees.

Worcester & Austin occupy a 3 story wooden building [illegible]x2[illegible] feet, located at No. 80 Chardon street, where they manufacture every description of brushes, making a specialty of the manufacture of the best of leather horse brushes. They commenced business in 186[illegible], have 17 employees, consume about 8,000 pounds of bristles, and do business to the amount of $25,000 per annum.

L. Kershaw occupies a 3 story brick building 30x25 feet, also 1 floor 80x80 feet in a 5 story brick building, located at Nos. [illegible] and [illegible] street, for the manufacture of fire and burglar proof safes. He commenced business in 1858, and has 40 employees, turns out 9 safes per week, of various sizes, varying in price from $75 to $2,500. His machinery is driven by an engine of 40 horse power built by Otis Tufts, supplied with steam from 2 tubular boilers, 25 horse power each, built by the Atlantic Works of this city. Does business to the amount of $70,000 per annum.

Kinsman & Robinson, manufacturers of sails, tents, awnings, &c., occupy 2 rooms each 60x25 feet in a four story brick building, located at No. 102 Commercial street. They commenced business in 1867, have 4 employees, and do business to the amount of $12,000 per annum.

Z. [illegible] Kite, sail manufacturer, occupies 2 floors 6[illegible]x25 feet in a four story brick building located at No. 122 Commercial street. He commenced business in 1865, and has 6 employees.

L. S. Morrison occupies [illegible] rooms 58x27 feet each, in a 5 story brick building located at No. 1 Elm street, for the manufacture of oval and square frames. He commenced business in 1860, employs [illegible] hands, consumes from 1[illegible],000 to 2[illegible],000 feet of mouldings per month, and does business to the amount of $25,000 per annum.

[illegible] J. Whiting occupies 90,000 square feet of room, located on Lenox street, for the manufacture of columns for buildings and all kinds of castings. He commenced business in 186[illegible], and employs 75 hands. His machinery is driven by an engine of 2[illegible] horse power, built by Campbell, Whittier & Co., furnished with steam from a boiler built by Isaac Adams, both of this city. He consumes 2[illegible] tons of iron per month, doing business of $10[illegible],000 per annum.

DIGHTON FURNACE CO.,

MANUFACTURERS OF

WROUGHT IRON PIPE

—FOR—

STEAM, WATER, & GAS.

Cooking and Parlor

STOVES,

In great variety.

Hollow Ware, Sinks, Linings,

—AND—

REPAIR PIECES

For all our stoves, constantly on hand, at our tabernacle.

NOS. 96 AND 98 NORTH ST.,

Boston, Mass.

Manufactory at North Dighton, Mass., on the Old Colony and Newport Railroad.

Among other enterprising manufacturing concerns of New England is the Dighton Furnace Company, manufacturers of wrought iron steam and gas pipe, and cooking, office and parlor stoves. Their manufactory is in the village of North Dighton, Mass., on the Old Colony and Newport Railroad, employing about 140 hands. They commenced business in the old foundry at North Dighton, in the spring of 1857, employing about twelve hands in the manufacture of stoves; but such was the demand for their goods, that, at the end of two years, they were obliged to build a new foundry, to which additions have been made every year. In 1863 they added to their already extensive business a mill, with two furnaces, for the manufacture of wrought iron pipe for steam, water and gas; in the manufacture of which, by new and improved machinery, and the employment of the best workmen, their aim has been to produce a quality of goods not to be excelled, and that their aim has been accomplished, is attested by the fact of the constantly increasing demand for their goods, and the entire satisfaction expressed by all who use them. About 2,000 tons of plate iron, 1,000 tons of pig iron, and 1,000 tons of coal are annually used by this company. The business of the company is managed in the most systematic and thorough manner, each of the partners, of whom there are four, having charge of a special department of the business, to which he gives his whole time and attention. Every man in their employ knows what his particular business is, and is expected to attend to it faithfully. The truth of each month is pay-day, when each man receives his month's wages. The monthly pay roll amounts to more than $6,000. The company have a store in this city, at 96 and 98 North street, through which a large portion of their business is done, and where a complete assortment of their goods can always be found. Mr. George F. Gavin is the Treasurer of the company.

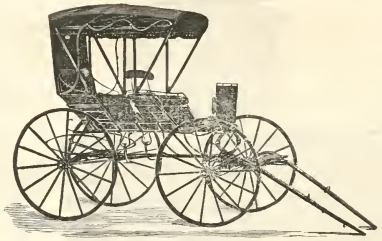
The Tremont Iron Foundry occupy 12,000 square feet of land, their main building being 108x40 feet, located at the corner of Hampshire and Culvert streets, for the manufacture of all kinds of castings. They commenced business in October, 1865, and employ 20 hands. Their machinery is driven by an engine of eight horse power, built by Campbell, Wheeler & Co., of this city, supplied with steam from a flue boiler built by McKay & Abbot, of East Boston. Men 300 tons of pig and scrap iron per month, and do a business of $50,000 per annum.

Pratt & Wentworth occupy machine room 175x75 feet, with an all 120x40 feet, also, pattern and store room; the whole covering 80,000 square feet of land, and located on Pyrolus street. They commenced business in 1844, and employ 130 hands. Their machinery is driven by an engine of 25 horse power, supplied with steam from a tubular boiler, built at New Bedford. They melt from 10 to 12 tons of pig iron per day, and produce from 25 to 40 different patterns of parlor and cook stoves, besides all varieties of hollow ware. For the past three years this firm have been making exclusively the Peerless Cook Stove, which took the first prize at the Paris Exposition, in 1867, and has taken several medals from other fairs in the country.

P. H. Miller occupies a three story wooden building, 30x52 feet, with a two story brick of 60x20 feet, located at 24 Factory street, for the manufacture of carpets and carpet rags. He commenced business in 1856, and employs 20 hands. His machinery is driven by two steam engines of 25 horse power with one tubular boiler 40 horse power built by Chadbrick & Sons, of this city. His machinery consists of 15 looms and one set of cards. He produces 5,000 yards of carpeting per month, consuming from 200 to 300 pounds of wool per day, and doing business of $40,000 per annum.

F. D. PARRY,

AMESBURY, - - - - - MASSACHUSETTS,



Manufacturer of

LIGHT CARRIAGES,

Of every description. Also,

SLEIGHS, ETC.

Buyers will find this the cheapest place in the country to buy their goods. Particular attention paid to the wants of dealers.

PLEASE SEND FOR CIRCULAR AND LIST OF PRICES. (See sketch page 142.)

CURTIS & MITCHELL occupy two floors, 80x20 feet, of a 3 story brick building, located at 24 Congress street, for the manufacture of type. The business was commenced by Mr. Curtis in 1844, and carried on by the present firm since Feb., 1858. They employ 7 hands, consume 400 lbs. of type metal per month, and do a business of $10,000 per annum.

M. MCINTOSH & SON occupy a 3 story wooden building, 100x30 feet, also a two story wooden building, 28x45 feet, with an L 50 x 20 feet, located at 61 Hampshire street, for the manufacture of ingrain carpets and carpet yarn, also every variety of blind, hinges and fastenings. They commenced business in 1841 and employ 30 hands. Their machinery is driven by an engine of 25 horse power, with 2 flue, boilers built by Campbell, Whittier & Co. of this city. They consume 1,000 lbs. of wool per week and 20 tons of iron per year, producing 125 yards of carpeting per day and doing business to the amount of $50,000 per annum.

HENRY R. EATON occupies one floor in a wooden building 100x40 feet, located at 1,179 Tremont street, for the manufacture of carriages. He commenced business in 1862 and employs 12 hands.

J. R. BRADSTREET & Co. manufacture rubber mouldings and weather stripes. They occupy 2 floors in a 5 story brick building, 20x50 feet, situated at 113 Haverhill street, where they employ 25 hands. The business was established in 1856, by J. R. Bradstreet. Their office and salesroom is at No. 52 Washington street.

ALONZO JOSSELYN occupies a 2 story wooden building 66x150 feet, and another 2 stories, 42x80 feet, located at 164 Ruggles street, for the manufacture of iron castings. He commenced business in 1850, employs 50 hands and consumes 100 tons of pig iron per month. His machinery is driven by an engine of 16 horse power.

A. RICHARDSON occupies 30,000 square feet of land on Pynchon street, on which is a brick building 100x90 feet, used for the manufacture of ale and porter. He commenced business in 1858 and employs 25 hands. His machinery is driven by two steam engines of 16 horse power, built by Campbell, Whittier & Co of this city, with 2 tubular boilers 40 horse power. He consumes 60,000 lbs. of hops and 70,000 bushels of barley and malt, producing 40,000 barrels of ale and porter per year.

MARGOT BROTHERS, manufacturers of watch cases; also, engine turners and jobbers, commenced business in 1862. They occupy 1 floor, 50x25 feet, in building located at No. 23 Water street, and employ 16 persons. Their machinery, consisting in part of 4 Rose engine and 7 watch case makers lathes, is driven by an engine in building adjacent.

WALTER S. BARNES manufactures paper boxes. He commenced business in Feb., 1868, and occupies 2 floors covering an area of 5,500 feet, in building located at No. 58 Water street, and employs from 40 to 45 hands. The motive power is furnished by one of Chase & Leavitt's 10 horse power engines, supplied with steam from an Allen & Endicott tubular boiler of 20 horse power. Every description of paper boxes are manufactured here.

CARR, EARL & Co., manufacturers of all styles of gold, jet and plated jewelry, commenced business during the fall of 1868. They occupy one floor 40x60 feet, in building situated at No. 38 Water street, and employ 16 workmen. A 10 horse power engine furnished with steam from a tubular boiler, supplies their motive power. Gold and silver electro-plating and gold and plated jewelry made to order.

THE BOSTON CORSET SKIRT Co. was incorporated in 1862. They manufacture the celebrated patented "Bonne Mode" sewed; also, clasped and spangled hoop skirts and corsets of

RICHARD POWER & SON,

Marble Works.

No. 83 HAVERHILL ST., BOSTON, MASS.

MANUFACTURERS OF

MONUMENTS, TABLETS, GRAVE STONES, CHIMNEY PIECES, TABLE AND WASH STAND TOPS, AND ALL KINDS OF MARBLE WORK.

the following kinds: Madam Le Favors perfect fitting bone shielded, the Crescent, and Mrs. Moody,s patented self-adjusting abdominal corsets. Their factory is situated at 117 Summer street. They occupy 4 floors, 30x75 feet each, with an ell, of the same dimensions.

The corset factory is at West Brookfield, Mass. It is 30 x100 feet, and 3 stories high. The average number of employees in the Boston factory is from 150 to 200. In the corset factory at West Brookfield, the average number of employees is 150, besides a large number engaged on work that is given out to many families in the village. They manufacture 75 dozen of the various kinds of hoop skirts, and 75 dozen corsets daily. In reference to the corsets we wish to make honorable mention of the new style, which was invented by Mrs. S. A. Moody, and called the abdominal corset. They are excellent for invalids, and, at the same time, are very well adapted for dress corsets. Parties who are interested would do well to send for circular which gives a full description, together with certificates from distinguished persons who have worn them. We have known of personal cases where they have been of the greatest benefit. They are for sale by the company at 117 Summer street, Boston, and at the New York agency, 783 Broadway.

Richard Power & Son occupy a 3 story wooden building 70x25 feet, located at 83 Haverhill street. Also, a 5 story brick building, 60x40 feet, located at 74 and 76 Beverly st., and manufacture monuments, tablets, grave stones, chimney pieces, table and washstand tops, and all kinds of marble work. They commenced business in 1851, and employ 40 hands. Their machinery is driven by an engine of 60 horse power, supplied with steam from 2 tubular boilers, built by Cook, Rymes & Co., of Charlestown. This firm do a business of from $40,000 to $50,000 per annum.

Wood & Abbott manufacture hoop skirts. The business was established by Amos L. Wood, in 1868, under the firm name of Stanley & Co. After a time, Mr. Stanley retired from the business, Mr. Abbott taking his place. Their factory is located in the building at 98 Summer street. They occupy 2 stories, each 120x35 feet, and employ from 75 to 100 hands. They use about 100 gross tapes, and 1,500 lbs. of skirt wire per week. The skirts are made under the Stanley patent, which is owned by this company.

A. R. Young & Co., manufacturers of hoop skirts. Their factory and principal salesroom is located at No. 87 Summer street. The business was established, in 1861, by A. R. Young. Their building is 4 stories high, 110x55 feet. In addition to which, they occupy 2 floors, each 100 ft. square, in the building located at the corner of Sudbury and Hawkins streets. Their employees average in number about 300. This company, in addition to the manufacture of hoop skirts, make the braids and cover the wire, for which they use 17 looms and 156 braiders. Their motive power is derived from a 40 horse power engine, supplied with steam from a tubular boiler, of 60 horse power, built by Allen & Endicott, of Cambridgeport, Mass. They have 5 or 6 patent rights, mostly of their own inventions, which enable them to made the excellent quality of skirts, for which they are noted.

Charles Holmes manufactures scouring machines, and carries on in general the machinist business, he having thus far been very successful in it. He occupies one floor of a brick building located at No. 22 Beach street, and has 5 employees. An engine of 40 horse power drives his machinery.

Robert Slade & Son, carriage manufacturers. The business was commenced by the senior partner in 1830, and they occupy a large wooden building, 114 x 77 feet, three stories, and employ 27 hands. This co npany is one of the oldest, now doing business in this city. They were the first parties to make cut-unders.

J. Harris & Son commenced the manufacture of copper vanes in 1867. Their salesroom and factory situated at 76 Kingston street, are about 50 x 25 feet. They employ seven persons and are the only manufacturers of raised copper vanes, of which they make about 100 different patterns, which number is constantly increasing. The price varies from $4 to $200 and upwards. The superiority of the vanes made by this company is from the fact that they are made of pure copper and gilded with the nicest gilt, and that the figures are raised; while most others are made of zinc, imperfectly gilded, and the figures flat. This company warrant all their work. They are the only company who make a specialty of manufacturing vanes. Their agents in New York, are J. D. West & Co.; in Rochester, J. W. McKindly.

H. B. Hatch, manufactures and deals in plain and fancy paper and wooden boxes, at wholesale and retail. The business was established in 1845 by Mark Worthly, it being the first paper box factory in this city. He occupies one floor, 100x50 feet, situated at No. 188 Washington street, and employs on an average 28 hands, consuming 75 tons of straw paper, 100 reams of lining paper and about $8,000 worth of fancy paper for covering boxes. Mr. Hatch is also dealer in all kinds of Christmas trimmings, confectioners' goods and ornaments for Christmas trees.

W. R. Bagnall manufactures suspenders and elastic webbing. The business was established June, 1865, capital $30,000. He occupies one floor in the brick building located at No. 9 Green street, covering 7,000 square feet of flooring, runs 9 looms, consumes $1,500 worth of stock per month. His machinery is driven by steam power. Messrs. Stephenson Bros. & Co. agents, No. 10 Milk street,

Bay State Paper Box Factory.

GEORGE B. HARRINGTON.

1065 Hanover Street, Boston.

[illegible]

J. J. BEALS & Co.

CLOCK MANUFACTURERS,

AMERICAN & FOREIGN CLOCKS, AND CLOCK MATERIALS.

Salesroom, Factory, Boston.

Engravers' Mill, Cutters and Fine Machinists.

J. J. Beals. Watches, Jewelers' Tools & Clock Supplies. Louis H. Beals.

W. J. Marshall & Co., carpenters and builders, are doing a good business at their shop, No. 1 Prospect street, and on Grove street. In the latter locality they have recently erected a number of dwellings, and are now engaged on a two-story building for Mr. Thomas Hall, on Prospect street. Mr. Marshall has been in business here for the past twenty years, and has always had a good trade.

S. B. Townsend occupies a three-story wooden building, 50x60 feet, on Main street, at Mt. Pleasant, where he has a planing-mill and sash and blind factory, and does a general business. He employs from 15 to 20 hands, and has been in business here for the past twenty years. Previous to that time he was engaged in the same business at Lowell, Mass.

J. L. Cornish occupies a 2-story brick building, 30x40 feet, on Main, at the Mt. Pleasant corner. He has a planing-mill there, and is engaged in the manufacture of sash, doors and blinds, employing from 10 to 15 hands, and does a business of $15,000 per annum. Previous business: Same line of business, at Lowell, Mass.

J. F. Stevenson & Co. occupy the 3d and 4th floors of a brick building, on the west corner of Kennedy street and Main, 50x60 feet, and have a planing-mill, sash and blind factory, and do a general jobbing business. They employ from 15 to 20 hands, and do a business of $20,000 per annum. Previous business: Same line of business, at Lowell, Mass.

Samuel Lee, Charles H. Bates, proprietors, occupy a two-story brick building, 40x45 feet, located at the Prospect street and Broadway corner, and manufacture all kinds of sash, doors and blinds, employing from 15 to 20 hands, and do a business of $20,000 per annum. Previous business: Same line of business, at Lowell, Mass.

A. W. Smith & Co. occupy the two-story brick building, 30x60 feet, on Main street, at the Mt. Pleasant corner, and manufacture sash, doors and blinds, employing from 15 to 20 hands, and do a business of $20,000 per annum. Previous business: Same line of business, at Lowell, Mass.

S. H. Kent & Co., manufacturers of sash, doors and blinds, occupy a two-story wooden building, 40x60 feet, on Middlesex street, between Prospect and Main streets, and employ from 15 to 20 hands, doing a business of $20,000 per annum.

J. A. Thompson & Son occupy the two-story brick building, 30x60 feet, on Main street, at the Mt. Pleasant corner, and manufacture sash, doors and blinds, employing from 15 to 20 hands, and do a business of $20,000 per annum. Previous business: Same line of business, at Lowell, Mass.

Patterson Manufacturing Co., Daniel Patterson, treasurer, occupy a two-story brick building, 40x60 feet, on Middlesex street, between Prospect and Main streets, and manufacture sash, doors and blinds, employing from 15 to 20 hands, and do a business of $20,000 per annum. Previous business: Same line of business, at Lowell, Mass.

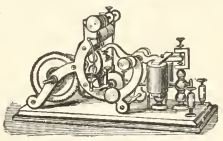
D. & J. W. Spaulding occupy the 3d and 4th floors of a brick building, 50x70 feet, on Main street, at the Mt. Pleasant corner, and manufacture sash, doors and blinds, employing from 15 to 20 hands, and do a business of $20,000 per annum. Previous business: Same line of business, at Lowell, Mass.

CHAS. WILLIAMS, Jr.

No. 109 COURT STREET,

(Near head of Sudbury,)

BOSTON, MASS.



MANUFACTURER OF

TELEGRAPH INSTRUMENTS,

GALVANIC BATTERIES,

AND

TELEGRAPH SUPPLIES,

OF ALL KINDS.

THE business of manufacturing telegraphic instruments, galvanic batteries, and telegraph materials, is comparatively new. The numerous lines of telegraph communication, and the enterprise exhibited in this business, has been appreciated by the public by a liberal patronage that is putting fortunes into the coffers of the various companies. The proposed postal system, if practically carried out, will be a great convenience to our citizens generally, and bring them within more direct communication with each other. The system of telegraphing is yet in its infancy. Not many years hence, every hamlet will be in close communication, thus aiding in the development of the immense resources of the United States. The Pacific Railroad is but a pioneer enterprise, to be imitated by others; and, as heretofore, the telegraph will follow in its wake, and cover the great West with a cheap and reliable conversation with our whole country, and the old countries across the sea. The building of the various lines and furnishing them has become a great traffic; and foremost among those carrying on this business, is CHARLES WILLIAMS, JR., 109 Court street. He occupies a room 90 x 40 feet, in a five story brick building. He employs fifteen persons in the manufacture of telegraphic instruments, galvanic batteries, telegraph materials, patent electrical burglar alarms;—the last of which is being extensively used among the masses;—the fitting up of offices, and communicating factories with each other, private telegraphs, etc. Mr. Williams commenced this business in 1856, and now ships his wares to all parts of the United States, British Provinces, South America and West Indies. He possesses every facility for filling any order, and his long experience with professional workmen makes his services valuable.

O. M. WENTWORTH occupies a three story wooden building, 140x25 feet. Also, 3,000 squre feet of land for displaying monuments, &c., located at Haverhill, corner of Beverly streets, and manufacture monuments, grave stones, tablets, scrolls and ornamental work of all kinds. Also, imported monuments, tablets and garden vases. He commenced business in 1854, and employs from 35 to 40 hands.

CHARLES J. SOLBERY occupies the fourth floor of a brick building 35x25 feet, located at 26½ Exchange street, for the manufacture of locks, knobs, and house trimmings. He commenced business in 1863; employs six persons and does a business of $2,000 per annum.

R. HOLLINGS occupies three floors of a brick building, 60 x55 feet, located at No. 14 Beverly street, for the manufacture of gas fixtures. He commenced business in 1850, and employs 35 hands. Power furnished from A. Wentworth & Co.'s marble works, in building adjacent.

CHARLES G. PEASE & CO. occupy a four story brick building, 24x90 feet, located at No. 13 Charlestown street; also, two floors of a brick building, 40x90 feet, as a factory, located on State street, Cambridgeport, Mass., for the manufacture of chamber, dining room and entry furniture. They commenced business in 1863, employ 35 hands, and do a business of $10,000 per annum.

MILLER BROS. & LENT occupy four floors, each 70x21 ft., in a 5 story brick building, located at No. 67 Union street, for the manufacture of Lent's bed and furniture springs. Also, coffin linings and robes. Also, are dealers in undertakers' material. The business was established in 1868. They employ 7 hands, and consume 1,000 lbs. of wire per day for making springs.

ANDREW MEXAL occupies a five story brick building, 75x 20 feet, located at No. 125 Haverhill street, for the manufacture of curried calf skins for boots. He commenced business in 1848; employs 10 hands, and curry from 400 to 1000 calf skins per week. His machinery is driven by a steam engine of 5 horse power, built by J. R. & S. S. Smith, Mass., supplied with steam from an upright boiler, built by the same firm.

WILLIAM H. MAINE occupies the first and second floors of a brick building 75 x 40 feet, located at No. 91 and 93 Haverhill street, for the manufacture of soapstone and marble work of every description. He commenced business in 1852, and employs 25 hands. Steam power furnished from an engine in building adjacent.

LELAND & BERRY occupy a three story brick building, 60 x50 feet, located at Nos. 91 and 93 Haverhill street, as a salesroom. Also, have a factory, 60 x 40 feet, located in Lawrence street, Charlestown, Mass., for the manufacture of centre and card tables, and sole manufacturers of Berry's spring bed lounge and improved spring bed bottom. They commenced business in 1868, and employ 12 hands. Their factory is driven by a steam engine of 30 horse power, supplied with steam from a flue boiler. This firm do a business of $25,000 per year.

KITTREDGE & DUTTON occupy two rooms, each 100x40 feet, in a three story wooden building, located at No. 77 Union street, for the manufacture of children's carriages, perambulators, sleighs, sleds, toy cabs, and carts. They commenced business in 1867, and employ 20 hands, the business was commenced by Mr. Kittredge in 1864.

F. BOYNTON occupies a room 60 x 35 feet, in a six story brick building, located at No. 11 Marshall street, for the manufacture of all descriptions of tin and sheet iron ware, planished copper boilers and drainers. He commenced business in January, 1867, employs 4 hands, and does a business of from $5,000 to $6,000 per annum.

CURRIER, PHILPOT & CO. occupy three floors of a brick building 100x50 ft., located at No. 5 Haymarket square, for the manufacture of sewing machine needles, shuttles, bobbins, screw drivers, oil cans, and every variety of sewing

R. D. PYKE,

MANUFACTURER OF

Patent Folding Bed Lounge and Mattress Combined.

This is the best and cheapest Lounge in the market. Call and examine for yourselves. Lounges of every description constantly on hand and for sale at **37½ Haverhill street, Boston, Mass.** All work warranted.

machine [illegible]. They commenced business in 1868, and employ [illegible] hands. Their power is furnished from a Holmes & Blanchard engine in another part of the building.

R. D. PYKE occupies three floors of a brick building, 40 x 25 feet, located at 37½ Haverhill street, for the manufacture of patent folding bed lounges and mattresses combined. He commenced business in 1865; employs 12 hands; turns out 80 lounges per month, and does a business of $40,000 per annum. His power is furnished from a steam engine in building adjacent.

J. F. CANNING & CO. occupy the second floor of a brick building, 40 x 20 feet, located at No. 12 Howard street, for the manufacture of paint and whitewash brushes of every description. They commenced business in 1866, and employ 8 hands, doing a business of $20,000 per annum.

MCGINNIS & MCGOWAN occupy the first floor of a wooden building 60 x 25 feet, located at No. 17 Charlestown street. Also occupy three floors of brick building located at 169 [illegible] street, for the manufacture of parlor furniture, sofas, and lounges. They commenced business in May, 1860, and employ 17 hands.

BOSTON AND MAINE GRANITE CO. occupy 1,000 square feet of land located at 158 Causeway street, for the manufacture of dimension and random stone granite platforms, underpinning, posts, cemetery fences, monuments, bases and hammered work of every description. This firm also own the "[illegible]" quarry, at Frankfort, Maine. They commenced business in March, 1868, and have 20 employees.

JOHN W. HARMON occupies the third floor of a brick building 50 x 20 feet, located at 65 Haverhill street, for the manufacture of spiral braids. He commenced business in 18[illegible], employs two hands, and has a capacity for making [illegible] dozen braids per week.

J. W. WILKINSON occupies second floor of a wooden building 28 x 40 feet, located at 82 Beverly street, and manufactures carriage springs of all descriptions. He commenced business in 1849, and employs three hands, turning out from 16 to 20 pairs of springs per month, and consuming about one ton of steel. Doing business of from $8,000 to $10,000 per annum.

GEORGE BLAKE occupies the second and third floors of a brick building 40 x 60 feet, located at 73 Haverhill street for mechanical drafting and pattern making. He commenced business in 1866, and employs 12 hands; consuming 10,000 feet of lumber per year, and doing business of $12,000 per annum. Power furnished from engine in the building adjacent.

W. C. [illegible] occupies the second floor of a brick building 26 x 40 feet, located at 63 Haverhill street, for the manufacture of brass work and brass finishing. He commenced business in August, 1866; and employs four hands. He also manufactures Zane & Co.'s patent brass [illegible], consuming 800 lbs. of brass per month. Power furnished from engine in a building adjacent.

G. A. SAWYER occupies a three story brick building, 50 x 22 feet, located at No. 122 Hanover and 130 Blackstone st., for the manufacture of mattress beds and bedding. He commenced business in 1864; employs [illegible] hands; manufactures 100,000 yards of ticking per year, and does business of from $40,000 to $50,000 per annum.

GEORGE H. REED & CO. occupy a five story brick building 60 x 60 feet, located at 568, 570 and 572 Commercial st., for the manufacture of [illegible]. They commenced business in 1852, and employ 20 persons. Use one boiler 10 horse power for heating purposes.

J. L. TAYLOR occupies three floors of a wooden building 20 x 40 feet, located at No. 2 [illegible] street, for the manufacture of doors, sash and blinds. He commenced business in 1867; employs two persons; consumes about 10,000 feet of lumber, and does a business of from $4,000 to $5,000 per annum.

EDWARD CONROY occupies the fourth floor of a brick building, 90 x 27 feet, located at No. 37 Haverhill street, for the manufacture of casks and kegs of all sizes. He commenced this business in 1866, and employs 3 hands. He has a patent machine of his own invention for making kegs and casks, for which he received a bronze medal from the London Exhibition, in 1862. He can turn out 1,000 kegs and 200 [illegible] per day, with one or three machines.

MOODY & WYMAN occupy a room 70 x 30 feet, in a five story brick building, located No. 78 Sudbury street, for the manufacture of paper collar machinery, upright drills, lathes, planers, &c. They commenced business November 15th, 1869, and employ on an average 22 hands, doing business of from $20,000 to $25,000 per year. Their machinery consists of 11 lathes, 4 planers, 1 upright drill, 3 gear cutters, and other small machinery, driven by an engine in building adjacent.

B. F. BOWMAN occupies a room 20 x 40 feet, in a five story brick building, located at 60 Union street, for the manufacture of ornamental and plain street lanterns for public buildings and railroad depots. He commenced business in 1862, employs 4 hands, and consumes 24 [illegible] per month, and from 40 to 50 lbs. of copper, turning out about 50 [illegible] lanterns per month, and doing a business of $5,000 per annum.

W. L. FERNALD & CO. occupy a five story brick building, 22 x 71 feet, located at No. 16 Charlestown street, as a salesroom. Also occupy a factory 60 x 74 feet, and two store rooms, each 18 x 30 feet, located at No. 85 Causeway street, and manufacture black walnut and chestnut chamber furniture. They commenced business in 1861; employ 50 hands and do a business of $100,000 per annum. Their power is furnished from an engine in building adjacent.

MOSES KNOX occupies the 1st, 2d and 3d floors of a stone building 20 x 40 feet, located at No. 98 Charlestown street, for the currying of calf skins. He commenced business in November, 1864, employs 15 persons, and curries 500 calf skins per week. Power furnished from engine in building adjacent.

H. B. [illegible] occupies two floors, each 30 x 30 feet, in a four story brick building, located at 109 [illegible] street, for the manufacture of [illegible] patent oil, [illegible] and gas [illegible]. He commenced business in 1868, employs 4 hands, and turns out from 40 to 50 [illegible] per month.

J. L. Brainard & Co. occupy five stories of a brick building, 100x30 feet, located at No. 55 Charlestown street, and manufacture chamber furniture of every description. They commenced business in 1864 and have 300 employees.

Maynard & Co. occupy three floors, each 40x90 feet, in a five story brick building, located at No. 67 Charlestown street, for the manufacture of coffee, spices, &c. They commenced business October 1st, 1868, and employ 4 hands. Their power is furnished from an engine of 100 horse power in a building adjacent. Office and salesroom, 48 and 50 Commercial street.

Henry McQuade occupies a room 50x25 feet, in a five story brick building, located at No. 70 Sudbury street, and imports and manufactures machine cut corks of all kinds. He commenced business in 1865, and has 7 employees; runs 3 machines, each capable of cutting 160 gross of corks. Steam is furnished from a 90 horse power engine in a building adjacent.

Boston Paper Box Manufactory occupy a room 50x50 feet, in a four story freestone building, located at No. 40 Hanover street, for the manufacture of paper boxes of all styles. They commenced business in 1866, employ from 12 to 20 hands, turn out upwards of 3,000 boxes per day and do a business of about $20,000 per annum.

Charles E. Hall & Co. occupy 12,600 feet of land partly covered by a brick building 85x24 feet, also a wooden building 115x35 feet, located at 69 Charlestown and 101 Haverhill streets, for the manufacture of monuments, chimney pieces, and marble work of every description. They commenced business in 1862 and employ 100 hands. Their machinery is driven by a steam engine of 80 horse power, built by the Corliss Steam Engine Co., of Providence, R. I., supplied with steam from two tubular boilers.

M. Engelhardt occupies the 4th and 5th floors of a brick building, 60x80 feet, located at No. 12 Howard street and No. 3 Tremont Row, for the manufacture of paper boxes and is also importer of fancy and embossed papers, gilt pictures, borders, &c. He commenced business in 1857, employs 15 hands, consumes about $500 worth of pasteboard and paper per month and does a business of $12,000 per annum.

Morton & Colcord occupy three floors, each 24x70 feet, in a six story brick building, located at 87 Friend street, and are manufacturers and wholesale dealers in wrought and cast iron steam, gas and water pipes, brass and galvanized iron pipes. They commenced business in 1865, employ 20 hands, consume 20,000 feet of pipe per month, doing a business of $100,000 per annum. Their machinery is driven by a 10 horse power steam engine, built by Otis Tufts, of this city, supplied with steam from a locomotive boiler of 20 horse power.

Strecker & Bros. occupy two rooms, each 30x45 feet, in a five story brick building, located at 144 Hanover street, for the manufacture of men's caps of every description. They commenced business in 1860, employ 52 hands, consume about 600 yards of cloth per month and do business of from $25,000 to $30,000 per year.

Isaac Sexton occupies a room 50x50 feet, in a three story wooden building, located at 69½ Union street, for the manufacture of wash boilers. He commenced business in July, 1868, employs 3 hands, turns out from 250 to 300 boilers per month, consumes from 1,100 to 1,200 sheets of tin per month and does a business of $5,000 per annum.

Samuel Ivors occupies three rooms, 40x40 feet each, in a three story brick building, located at 144 Blackstone street, for the manufacture of sofas, lounges, photograph and enamelled chairs. He commenced business in 1858, employs 6 hands and does business amounting to $12,000 per annum.

L. W. Cass occupies two floors, each 20x25 feet, in a 3 story wooden building, located at 162 Blackstone street, for the manufacture of picture and looking glass frames, of every description. He commenced business in 1860; employs 3 hands, consumes about $600 worth of mouldings per month, and does a business of $20,000 per annum.

A. Conant & Co. occupy three floors, each 95x35 feet, in a six story brick building, located at No. 12 Marshall street, for the manufacture of portable desks, fancy boxes, and looking glasses, of every description. They commenced business in 1856, and employ 16 hands. This firm are the oldest and most experienced manufacturers of boxes and desks in the United States. Since their first introduction, in 1830, they have had a constantly increasing sale. They do a business amounting to $30,000 per annum.

Richardson & Lane occupy the fourth and fifth floors of a brick building, 30x30 feet, located at No. 7 Haverhill st., for the manufacture of coffee. They commenced business in 1860; employ four hands, turn out 3,000 lbs. of coffee per week, and do a business of $35,000 per annum.

Edwin N. Cleaves occupies the third floor of a brick building 20x60 feet, located at No. 69 Haverhill street, for the manufacture of block tin, rubber and glass moulds, &c. He commenced business in 1856; employs 10 hands, and does a business of $10,000 per annum. Power furnished from an engine in building adjacent.

Argyle Machine Co. occupy four floors of a brick building, 38x36 feet, located at 73 Haverhill street, for the manufacture of pebbling and embossing machines, and improved equal pressure rolls. They commenced business in 1868, and employ 6 hands. Their power is furnished from J. B. Mitchell's engine, in building adjacent.

R. Horton, Jr. occupies the fifth floor of a brick building 75x100 feet, located at 73 Haverhill street, and manufactures trunks. He commenced business in 1848; employs six hands; turns out nine dozen trunks per week, and does a business of $18,000 per annum.

Robert Duncan occupies the fourth floor of a brick building 70x28 feet, located at No. 113 Haverhill street, for the currying of harness and hose leather. He commenced business in 1863; employs five hands, and curries 200 sides of leather per week. His motive power is furnished from an engine in building adjacent.

Bray, Newell & Co. occupy three floors of a brick building 40x80 feet, located at Nos. 53 and 55 Haverhill street, for the manufacture of last lathes, screw, leather and cam presses; also, patent seamless boxes. They commenced business in 1863, and employ 25 hands. Their motive power is furnished from an engine in building adjacent.

Turner & Newhall. occupy the fourth and fifth stories of a brick building, 20x60 feet, located at 65 Haverhill street, for the manufacture of patterns. They commenced business in 1864; employ seven hands; consume from 500 to 1,000 feet of pine and cherry lumber per month, and do a business of $8,000 per annum.

William E. Jarvis occupies the third and fourth floors of a brick building, 40x75 feet, located at No. 29 Haverhill st., for the currying of polished wax splits and every description of leather. He commenced business in 1863; employs 20 hands, and does a business of $60,000 per annum. His motive power is received from an engine in an adjacent building.

J. Graves & Co. occupy the first floor of a brick building, 75x22 feet, located at 35 Haverhill street, for the manufacture of marble and free stone tools. They commenced business in 1865; employ 6 hands, and consume about $1,500 worth of steel per year.

J. T. & N. Gaines occupy three floors of a stone building, 30x60 feet, located at No. 2 Haymarket square, for the manufacture of coffins. They commenced business in 1858, employ 8 hands, and produce 1,000 lbs. of coffee per day. Their motive power is furnished from an engine in building adjacent.

T. Graham occupies the fourth and fifth floors of a brick building, 65x40 feet, located at 131 Haverhill street, for the currying of calf skins and all kinds of leather. He commenced business in 1858, and has 20 employees. These works are driven by a steam engine of 10 horse power, supplied with steam from an upright boiler, 14 horse power, built by Thomas Cunningham, of Charlestown, Mass.

G. W. Hall & Co. occupy one-half of the second story of a wooden building 50x30 feet, located at No. 155 Haverhill street, for the manufacture of Neal's improved sandpaper paste. They commenced business in 1866, employ 4 hands, consume from 10 to 15 barrels of flour per week, and do business of from $10,000 to $15,000 per annum. Their motive power is furnished from an engine in building adjacent.

Comstock, Emerson & Co. occupy rooms 75x40 feet in five-story brick buildings, located at 114 Sudbury street, for the manufacture of all kinds of envelopes, having a capacity for turning out 150,000 per day. This firm have 27 employees, and run 17 machines. Their salesroom is located at No. 93 Water street.

Bird, Wright & Co. occupy five rooms, 45x22 feet each, in a four-story brick building, located at the corner of Court and Brattle streets, for manufacturing all kinds of confectionery. The business was established in 1858, and employs 18 hands. They consume from 20 to 25 barrels of sugar per day, and do business to the amount of $100,000 per annum.

Whittemore & Bean occupy a room 50x40 feet, in a four-story brick building located at No. 76 Chardon street, for the manufacture of wax thread sewing and pegging machines. They commenced business in 1866. Have 30 employees and turn out 20 sewing and 14 pegging machines per month. Their machinery, consisting of lathes, planers, drills, &c., is driven by an engine of 80 horse power in building adjacent. They do business to the amount of $40,000 per annum. Their office and salesroom is at No. 30 Pearl street.

Fisk & Gardner, importers and wholesale dealers in foreign and American watches, fine jewelry, solid silver and plated ware, and manufacturers of copper range and hollow ware, occupy a three-story granite building, 60x14 feet, located at No. 199 Washington street. They commenced business in 1862. Have 11 employees, and do business of $120,000 per annum.

Richard Farley, manufacturer of tents, sails, awnings, &c., occupies two floors of a four-story brick building, located at No. 62 Commercial street. He commenced business in 1861, has 10 employees, and does business to the amount of $20,000 per annum.

The Imperial Soap Co., George W. Safford & Co., Agents, are located in the new building, corner of Chardon, Bowker and Portland streets. They occupy a space of about 14,000 square feet, heating and drying entirely by steam, and employ a force of from 20 to 30 hands. They manufacture a large variety of fancy toilet soaps, many of which are of a quality to compare favorably with the best French and English goods. Their nacks, a specialty of silver soap for polishing plate—an article of much merit—the fame of which has gone abroad, as large orders from England and the continent of Europe attest. They also ship considerable quantities of their toilet and perfume soaps to London, Hamburg, &c.

Hunt & Ransom occupy 5,000 square feet of flooring, located at Nos. 49 and 51 Pitts street, for the manufacture of copper work of every description. They commenced business in 1848, and have 40 employees.

James Hall & Son occupy 15,000 feet of square room at No. 21 Hawkins street, for the manufacture of first class carriages of every description. They commenced business in 1845 and have 30 employees. This firm received, "for carriages displayed by them," a silver medal at the Paris exposition in 1867; also, three silver medals from the Mass. Charitable Mechanic Association at their fairs in 1850, 1860 and 1865. They turn out 100 carriages, and do business amounting to $75,000 per annum.

Haley, Morse & Boyden occupy a four story brick building, 120x60 feet, as a manufactory, located in the rear of No. 20 Beach street, for the manufacture of furniture of all descriptions; also occupy as an office and salesroom, a seven story freestone building, 170x45 feet, situated at No. 405 Washington street. The business was established in 1857. Their machinery, "best adapted to the business," is driven by an engine of 40 horse power, built by George W. McLauthlin & Co. of this city, supplied with steam from a tubular boiler built by Campbell, Whittier & Co., also of this city. They do business amounting to $600,000 per annum.

E. Strain & Co. occupy a room 55x22 feet, in a four story brick building, located at No. 63 Broomfield street, for the manufacture of sewing machine needles, the product of which is 75,000 per week. They commenced business in 1868, and have 8 employees.

H. M. Richards' Jewelry Co. occupy about 7,500 square feet of room, in a five story brick building, located at No. 7 Green street, for the manufacture of jewelry and fancy goods. The business was established by Mr. H. M. Richards in North Attleboro', Mass., about 20 years since, who removed to this location in the spring of 1868. This company have from 50 to 100 employees, and do a business of from $80,000 to $100,000 per annum. Their machinery is driven by an engine of 15 horse power in building adjacent.

Enos W. Lovejoy occupies a room, 50x30 feet, in a four story brick building, located at No. 16 Harvard Place, for the manufacture of gold and silver leaf and bronzes. He commenced business in 1837, has 9 employees, turns out 40 packages per week, each package containing 500 leaves, and does business amounting to $25,000 per annum.

John A. Hughes & Co. occupy three rooms, 100x50 feet, in a five story brick building, located at No. 311 Washington street, for the manufacture of glass show cases of every description. They commenced business in 1847, have 15 employees, turn out about 800 cases per annum, and are the largest manufacturers of the kind in New England.

Bassett & Whittemore occupy two rooms 60x20 feet in a three story brick building, located at No. 7 Bath street, for the manufacture of drawings, linings, varnishes, oils, &c. They commenced business in 1866, and have 5 employees. This firm are also desirous to purchase gum suitable for tanning, currying and lubricating purposes.

Brown & Reynolds occupy two rooms in a four story brick building, located at No. 24 Broomfield street, for the manufacture of German silver plated ware of all descriptions. They commenced business in 1864, and employ 20 hands.

Moses Damerell occupy the upper floor, 40x27 feet, of a four story brick building, located at No. 49 Broomfield street, for the manufacture of paper boxes. They commenced business in 1867, have 15 employees, and consume two tons of straw board per month.

EDWARD CODY occupies the lower floor of a four story wooden building, 50x25 feet, located at No. 33 Hawkins street, where he employs 7 hands in the manufacture of brass and composition castings of every description. He commenced business in 1865, consumes about two tons of metal per month, and does a business of $12,000 per annum.

JOSEPH L. ROSS occupies a four story wooden building, covering 10,000 square feet of room, located at No. 42 Chardon street, where he gives employment to from 60 to 80 hands, for the manufacture of school furniture, of which he is the oldest manufacturer of the kind in the United States, having been engaged in the business upwards of a third of a century. At this location all the wood work and finishing is done, the machinery used being as follows:—three planers, one upright moulding and one horizontal moulding machine, one jointing, one boring, one dove-tailing, and one tenoning machine, six splitting and four cutting-off saws, which is done by an engine of 80 horse power, built by Otis Tufts, of this city, supplied with steam from two tubular boilers, 40 horse power each, one built by the Atlantic Works, and the other by Campbell, Whittier & Co., both of this city. Mr. Ross also occupies a foundry, 100x45 feet, located at Portsmouth, N. H., where the iron work used in his business is made. He is also manufacturer of Philbrick's primary school slates, the product of which amounts to 500 per week.

BREWER & FOWLE occupy a four story brick building, 60 x50 feet, located at No. 150 Purchase street, where they manufacture ship bread and crackers. They commenced business in 1865; consume 30 barrels of floor per day, and employing eight hands. Their machinery is driven by a 15 horse power engine built by Campbell, Whittier & Co. of this city, furnished with steam from a flue boiler, manufactured by Hinkley & Drewry, of Boston, Mass.

THE BOSTON TYPE FOUNDRY, located at the corner of Water and Congress streets, is the oldest letter foundry in this part of the country, having been commenced in 1817. It is carried on by a company composed of parties in various ways connected with the business, and employs about 70 hands, in the manufacture of metal types, brass rules, electrotype plates, and other articles for printers' use.

From 60 to 70 tons of types, and 10,000 feet of brass rule are among the manufactures of this establishment; the limited amount of power required being supplied by a Roper engine.

The manufacture of types is a very interesting process, and the proprietors are at all times pleased to exhibit it to their friends.

GEO. F. BLAKE & CO. occupy 13,000 square feet of room in a four story brick building, located at the corner of Portland and Chardon streets, where they employ 45 hands in the manufacture of Blake's patent steam pumps. The business was established in 1865. Their machinery, consisting of 23 lathes, 3 drills, 1 milling machine, 4 planers, and other smaller machinery, is driven by an 80 horse power engine, Babcock & Wilcox patent, built by the Atlantic Works of this city. This firm consume about 25,000 pounds of iron and 1,500 pounds of composition monthly, and have a capacity for turning out about 550 pumps per annum, doing business to the amount of $200,000. George F. Blake, Peter Hubbell and Job A. Turner constitute the firm. They have a salesroom at the corner of Broadway and Liberty street, New York City.

WILLIAM H. WENTWORTH & CO. occupy 3,000 feet of room, located at No. 14 Marshall street, also a three story wooden building, 80x22 feet, located at No. 89 Haverhill street, for the manufacture of soapstone stoves and soapstone work of every description. This firm also occupy a four story wooden building, 40x35 feet, situated at No. 18 Bowker street, for the manufacture of marble work of all kinds. They commenced business in 1848 and have 48 employees. They are also sole agents for the Francestown Quarry Co., of Francestown, N. H. The amount of business done by them exceeds $100,000 per annum.

G. W. ROBINSON & CO. occupy a five story brick building 70x40 feet, located at No. 80 Richmond street, for the manufacture of ship's fastenings and trimmings of all dimensions. They also have a brass foundry connected with their manufactory, for making all kinds of brass and composition castings. They have in use 40 machines, consisting of engine lathes, planers, &c., which are driven by an engine of 10 horse power, built by Adams & Hammond, of this city, steam being supplied by one double flue boiler, 15 horse power, built by Otis Tufts, also of this city. They do business of upwards of $75,000 per annum.

THE BOSTON DRUG MILLS occupy 2 stone and 1 wooden building, 40 x 40 feet each, two stories high and basement, located on Parker street, for powdering and grinding drugs, dye stuffs, chemicals, &c., and for the manufacture of foundry facings. The business was established in 1867, and gives employment to 10 hands. Their machinery consisting of 8 chasers, 8 stamps, and 3 runs of stones; is driven by a 20 horse power engine, with a tubular boiler, built by the Swamscot Machine Co., of South Newmarket, N. H. This firm have an office and salesroom, located at No. 90 North street.

THE AMERICAN LASTING AND PEGGING MACHINE CO. was incorporated in 1866. Capital, $100,000. They occupy rooms in a five story brick building, located at No. 76 Sudbury street, where they employ 25 hands in the manufacture of lasting machines, and have a capacity for turning out 350 per annum, the average price of which is $200 each. Geo. H. Johnson is Agent for this company.

E. L. PRATT occupies a room in a five story brick building located at No. 76 Sudbury street, for the manufacture of paring, coring and slicing machines, tobacco cutters, egg beaters, &c. He commenced business about 1802 and employs from 8 to 10 hands.

S. W. CLAPP & CO. occupy a four and a half story building, 50x22 feet, located at Nos. 91 and 93 Blackstone street, for the manufacture of the celebrated Key Stone gas burner, and a variety of cooking, office and parlor stoves. They commenced business in 1850, and employ 5 hands.

RICH, PITMAN & CO. occupy a four story brick building, 80x60 ft., located at from Nos. 82 to 86 Union street, where they manufacture trunks, valises, and carpet bags, of various kinds, the product of each being upwords of 60 dozen per week. This firm commenced business in 1852; have 50 employees, and do business amounting to from $150,000 to $200,000 per annum.

THE BOSTON FOLDING LAMP SHADE CO. occupy a floor 75x20 feet in a four story brick building, located at No. 115 Court street, where they employ 40 hands in the manufacture of Hartshorn's patented lamp shades, turning out about 100 doz. daily. They use an 8 horse power cylinder boiler for drying purposes, built by Allen & Eudicott of Cambridgeport, Mass.

B. F. STURTEVANT occupies two rooms, 75x75 feet in a five story brick building, located at Nos. 72 and 82 Sudbury street, where he manufactures all kinds of blowers for furnaces and for ventilation. He commenced business in 1865, has 40 employees, and turns out about 100 blowers per month, varying in price from $25 to $500 each. The amount of business done per annum amounts to from $150,000 to $200,000.

GEORGE COOLIDGE,

Invention Agent and Publisher,

3 Milk Street, opposite Old South Church, Boston,

After July 1, 1869, at No. 289 Washington Street, Boston.

SOLE AGENT OF THE PATENTEE FOR THE UNITED STATES, FOR

BARKER'S PATENT

Window Screen,

SOLD IN COMPACT PACKAGES AS A

NEW ARTICLE OF TRADE.

TRADE MARK

The Frame consists of Corner Sockets and light Wooden rods, having a groove and tongue, which fit together and hold the Netting without the use of tacks or other fastenings, and will fit any window by merely sawing off the rods the proper length. The window may be opened or closed while the Screen is in place, or the Screen instantly removed at pleasure. Patented Feb. 12, 1867, and the only valid patent of Rods with connecting corners.

Packages for Retail Trade, each containing the parts for 1 doz. Frames, with Rods 2½ by 3 feet long.

	Retail Price.
Package No. 1, Stained Pine Rods, plain tin corners	$ .00
Package No. 2, Stained Pine Rods, Japanned corners	7.00
Package No. 3, Oiled Walnut Rods, Japanned corners	9.00

Sold at wholesale in cases, each case containing six packages (2 packages of each No. varied to order), with MODEL, showing exactly how to put together and put up the Frame and five circulars for distribution.

The Netting supplied by the piece to order, at market prices. (Pieces usually supplied contain sufficient for 16 ordinary Frames.) **State and County Rights for Sale.**

Proprietor of the Celebrated BONE POLISH,

For Windows, Mirrors, Lamp Chimneys, Silver, Plated and Tin Ware, &c. It will instantly remove paint, glass, etc., without soap, water or slops. Price 25 cents per box. Sold at wholesale and retail.

THE BEST WRINGERS.

From different manufacturers, for sale at retail or wholesale. Also, Wringers repaired.

TILLEY'S HEMLOCK BARK BLACKING.

A new article, softening and preserving the Leather, and producing a brilliant polish. TRY IT.

PROPRIETOR AND PUBLISHER OF

The Boston Almanac, issued annually in December, sold extensively in all New England, and mailed to all parts of the country. It is the business book of Boston for country circulation, having been issued for thirty-one years, and originated the first Business Directory ever issued in any country, which has been so leading feature for a quarter century. It also contains useful information, classified as National, State, County, City and Transportation Registers, with a classified list of general events, calendar and memoranda pages, etc. *The Boston Almanac* for 1869 comprises in its classification the newly annexed cities of Boston and Roxbury and a large map of Boston and Roxbury, with the towns of Dorchester, West Roxbury, Brookline, Brighton, and parts of other adjoining towns and wards, with the Harbor complete, showing all the islands and places of interest. Price fifty cents, postage prepaid. This publication is charged up to hotels and other public places in Boston and other cities, for the benefit of its advertising customers.

The Lady's Almanac, issued annually, in October or November, in gilt edges and fine binding, as a beautiful Holiday Memento. It has an extensive circulation, having been issued fifteen years. Advertisers who desire to reach the Families of Culture to an effective measure will find its Advertising Department well worthy of their notice. Price fifty cents, mailing post paid.

Boston Business Street Directory and Illustrated Guide, 1867-68. This publication comprises pictorial sketches of Boston combined with the new and original plan of a complete Directory of the city by streets, classified by numbers and streets in regular order. This book also contains a map of Boston. Price fifty cents, mailed post-paid.

MERRIAM & Co. occupy a 3½ story wooden building 75x15 feet, located at 19 Brattle square, where they employ 20 hands in the manufacture of dies and seal presses, for seal engraving, turning out daily about 25 presses. This firm are also manufacturers of medals, they being the only manufacturers in New England.

THE EYELET TOOL CO. occupy a room 45x45 feet in a 5 story brick building, located at No. 1½ Pitts street, where they employ 12 hands in the manufacture of eyelet tools, punches, belt hole cutters, &c. They commenced business in 1861, turn out 75 eyelet tools per day, and do business upwards of $100,000 per annum. Their machinery, consisting of lathes, drills, milling machines, &c., is driven by an engine of 40 horse power in building adjacent. S. E. Robinson is agent for this company.

THE SNOW MANUFACTURING CO. occupy the second floor of a four story brick building, 80x40 feet, located at No. 9 Bowker street, where they manufacture gold and silver plated jewelry, including badges, metalic advertising tags, &c. The business was established by John E. Snow & Co. in 1866, and changed to the Snow Manufacturing Co. in March, 1868. The product of their works is sold principally in New York and in the New England States.

SILSBY & CHENEY occupy a room 73x33 feet in a five story brick building, located at No. 76 Sudbury street, for the manufacture of rope, cordage and twine machinery, &c. They commenced business in 1865, and have 15 employees. Their machinery, consisting of 2 planers, 12 engine and drilling lathes, 1 upright drill, 2 gear cutters, &c., is driven by a 90 horse power engine in building adjacent. They do business amounting to $35,000.

E. R. DUNHAM occupies 2 floors 50x30 feet each, in a five story brick building, located at No. 4 Blackstone street, for the manufacture of boot counters. He commenced business in 1848, and has 4 employees.

JOHN KIMBALL & SON occupy the upper floor of a five story brick building, 95x80 feet, located at No. 62 Sudbury street, for the manufacture of ladies' boots of finest qualities. They commenced business in September, 1862; have from 30 to 50 employees, the product of each month's work being about 1,600 pairs. They do business amounting to upwards $60,000 per annum.

M. A. FINNEGAN occupies a room in a four story brick building, located at No. 61 Cornhill, for the manufacture of Venetian blinds for parlors, bay windows, school rooms, churches, &c. The business was established in January, 1864. His goods are sold all over the United States.

WM. A. ORCUTT occupies rooms in a four story brick building located at No. 65 Cornhill, for the manufacture of Orcutt's improved lightning rods. He commenced business in 1835, and employs from from 5 to 10 hands.

HERMAN STRATER & SONS occupy 3 floors 87x28 feet each, in a five story brick building, located No. 78 Sudbury street, for the manufacture of all kinds of copper and brass work. They commenced business in 1834; have 30 employees, and consume about 70,000 lbs. of copper per annum, beside a large amount of brass, lead and block tin. They do business amounting to $200,000 per annum.

ROBERT WEBB, manufacturer of black diamond stove polish, and dealer in German and Ceylon black leads, occupies two floors, 60x25 feet, in a five story brick building, located at No. 16 Blackstone street. He commenced business in 1866; has 8 employees, turns out 8,000 gross per annum, and does a business amounting to $20,000.

W. H. AREY occupies a room 30x100 feet, in a four story brick building, located at No. 282 Commercial street, for the manufacture of curried leather of all kinds. He commenced business in 1862, and employs 10 hands.

HENRY HEIMS occupies the 3d floor of a four story brick building, 100x100 feet, located at No. 106 Sudbury street, where he employs 10 hands, in the manufacture of billiard tables, and all the fixtures connected therewith. He commenced business in 1863, produces about 150 tables per annum, and does business to the amount of $60,000.

J. E. CAME & Co. occupy three floors, 90x40 feet, in a five story brick building located at No. 114 Sudbury street, for the manufacture of Phelan's improved billiard tables, balls, cues, &c. They commenced business in 1848. Have 20 employees, and do business to the amount of $75,000 per annum. This firm are also agents in the New England States for Phelan's combination cushions, pocket supporters, improved slate beds, &c.

T. S. CLOGSTON & Co. occupy the second floor of a five story brick building, 100x80 feet, located at Nos. 80 and 82 Sudbury street, (Codman building,) for the manufacture of Clogston's patent high or low pressure steam heating apparatus. They commenced business in 1859, and have thirty employees. Their machinery, consisting of one milling machine, one planer, one drilling lathe, two Fox lathes, three engine lathes, two pipe machines and two upright drills, is driven by an engine in building adjacent.

T. R. ALDEN & Co. occupy a room 40 feet square, in a five story brick building, located at No. 106 Sudbury street, for the manufacture of ladies' boots. They commenced business in January, 1868, and have 20 employees, producing about 125 pairs per week. They do a business of from $20,000 to $30,000 per annum.

A. B. BURKMAN occupies two floors, 25x40 feet, in a four story brick building, located at No. 218 Commercial street, for the manufacture of all kinds of trunks. He commenced business in July, 1866, and employs three persons.

J. F. FOLSOM occupies a three story wooden building, 15x40 feet, located at No. 1 North Centre street, for the manufacture of corn cakes, corn balls and sugared pop corn. He commenced business in 1857, and employs five persons.

A. BLOOD, manufacturer of all kinds of carriages, occupies 16,000 square feet of room, located at Nos. 51, 53 and 55 Elliot street. He commenced business in 1842, and has two employees.

CHARLES J. MILLARD occupies a two story wooden building, 50x23 feet, located at No. 64 Harrison avenue, where he manufactures all descriptions of soap stone work, such as sinks, wash tubs, stoves, fire places, &c. He commenced business in 1841, and has two employees.

THE AUTOMATIC GAS MACHINE Co. occupy a room, 60x40 feet, in a five story brick building, located at the corner of Pitts and Green streets, for the manufacture of automatic gas machines. They commenced business in 1863 and have 20 employees. D. W. Holmes is agent and treasurer of this company. Their office and salesroom is at No. 7 Liberty square.

L. GOERS & Co. occupy two floors, 50x75 feet, in a four story brick bilding, located at No. 282 Commercial street, for the manufacture of inner soles. They commenced business in 1856, employ 20 hands and do business to the amount of $15,000 per annum.

BLANEY & LOWELL occupy a room 22x60 feet, in a four story brick building, located at No. 234 Commercial street, for the manufacture of sails, tents, awnings, &c. They commenced business in 1858.

M. PIERCE occupies three floors, 65x25 feet each, in a four story building, located at No. 115 Hanover street, where he employs 27 hands in the manufacture of cigars and cheroots of all grades. He commenced business in 1861, produces 6,000 to 12,000 cigars and 40,000 cheroots per annum, doing business of $50,000.

A. L. Haskell & Son occupy four floors, 90x20 feet, in a building located at No. 13 Merrimac street, where they manufacture an upholstered bed, the product of which is about 3,500 per annum. This firm also occupy a five story brick building, 70x32 feet, situated at No. 124 Hanover street, where they manufacture mattresses of all kinds, and where their office and salesroom is located. They commenced business in 1851, have 45 employees and turn out about 18,000 mattresses per annum, doing business to the amount of $300,000.

E. G. Peterson occupies 2 floors, 40 x 15 feet, in a four story brick building, located at No. 69 Cornhill, for the manufacture of show cases, desks, counters, office furniture, &c. He commenced business in 1862, and has 5 employees.

Orin Sherman occupies the upper floor of a three story wooden building, 100x40 feet, located at No. 69 Charlestown street, where he employs between 30 and 40 hands in the manufacture of Sherman's improved clothes wringer, with or without cog wheels. He produces 200 wringers per day, doing business to the amount of $300,000 per annum.

Morse & White occupy a four story brick building, 45x 32 feet, located at from 75 to 81 Cornhill, where they employ 12 hands in the manufacture of brass, copper, and iron wire cloths and nettings, and wire work generally. They commenced business in 1843.

J. W. Haskins occupies 3 floors, 60x25 feet, and storehouse, located at No. 5 Fulton and 36 Clinton streets, for the manufacture of corn cakes and sugared pop corn. He commenced business in 1862; has 10 employees, and facilities for making 80,000 corn cakes per day.

Patterson & Lavender occupy 4 floors, 60x40 feet each, in a five story brick building, located at No. 116 Fulton st., for the manufacture of store and office furniture. The business was established about 20 years since. They have 40 employees, and do business to the amount of $50,000 per annum. Steam power is furnished from an engine in a building adjacent. Their warerooms are located at Nos. 43 and 45 Cornhill.

Goward & Co. occupy the 2d floor of a four story brick building, 50x25 feet, located at No. 53 Elm street, for the manufacture of pop corn confectionery. They commenced business in 1866; have 10 employees, and a capacity for turning out 20,000 cakes per day.

A. D. Puffer occupies four floors in a five story brick building, 90x25 feet, located at No. 48 Portland street, where he employs 25 hands in the manufacture of Puffer's patent soda water apparatus, and ale pumps. He commenced business in 1842, and does business to the amount of $60,000 per annum.

John L. Whiting occupies three floors 50x25 feet in a four story brick building located at No. 8 Blackstone street, where he employs 6 hands in manufacturing brushes. He commenced business in 1865; makes a speciality of manufacturing paint, and whitewash brushes.

William H. Bent occupies two rooms, 70x20 feet, in a two story brick building, located at No. 80 North street, for the manufacture of parlor furniture. He commenced business in 1866, and has 3 employees.

The New England Wax Thread Sewing Machine, Almar Townsend, proprietor, occupy two rooms, one 80x80 feet and one 80x40 feet, in a five story brick building, located at No. 76 Sudbury street, for the manufacture of wax thread sewing machines. The business was established about 20 years since. They have from 50 to 90 hands employed, run 30 engine lathes, 15 hand lathes, 8 upright drills, 4 milling machines, 10 planers, 2 horrizontal drilling machines, and other machinery adapted to the business. These machines are driven by an engine of 90 horse power, in building adjacent. They also manufacture the New Era pegging machine, and the Mouitor Eyeleting machine, and are just introducing a patent wire screw machine for screwing instead of sewing on the soles of boots and shoes. These machines are all patented. Office and salesroom 26 Pearl street.

O. H. Weed & Co. occupy two floors, 80x25 feet each, in a five story stone building, located at No. 31 Brattle street, for the manufacture of Weed's improved rubber band carpet sweeper and spring beds, of which they make 500 each per month. They commenced business in 1862, have 12 employees and do business to the amount of $50,000 per annum. This firm intend soon to increase their business to double its present capacity.

Starratt & Marsters occupy a room 25x40 feet, in a five story brick building, located at No. 32 Faneuil Hall square, for the manufacture of scales and balances; also Starratt's patent steel-yard. They commenced business in October, 1867, and have 4 employees.

Richard Ganley occupies a room 20x20 feet, in a five story brick building, located at No. 32 Faneuil Hall square, for the manufacture of patent leather horse collars. He commenced business in October, 1865, and employs 2 persons.

E. F. Southward occupies a room 25x50 feet, in a four story brick building, located at No. 38 North Market street, also a sales and finishing room, located at No. 44 State street. He manufactures patent open work signs and banners of his own invention, patented May 5, 1868, and employs 12 hands.

J. S. Johnston, Jr. occupies a four-story wooden building 80 x 24 feet, located at No. 89 Hanover street, where he manufactures confectionery of all kinds, giving employment to 18 hands. He commenced business in 1850, consumes about 20 barrels of sugar per week, and does business amounting to $75,000 per annum.

N. Little & Co. occupy three floors, 50 x 20 feet, each in a four-story brick building located at No. 49 Cornhill, for the manufacture of blank books, diaries, etc. They commenced business in January, 1867. Have 10 employees, consume about $1,000 worth of paper per month, and do a business amounting to $30,000 per annum.

Waitt & Bond occupy two rooms, 70 x 20 feet, in a two story brick building located at No. 80 North street, for the manufacture of cigars of all grades. They commenced business in 1865, and employ 10 hands.

National Chemical Co., John C. Hursell & Co. proprietors, occupy four rooms covering about 3,500 square feet of flooring in a 5½ story brick building located at No. 5 Chatham row, for the manufacture of flavoring extracts of all kinds; also, Hursell's Purity, for the hair. They commenced business in August, 1867, and employ 12 hands.

A. L. Cutler & Co. occupy four wooden buildings containing about 5,000 square feet of flooring, located on Island street, for the manufacture of varnishes and japans. The business was established in 1848. They employ from 3 to 6 persons. Their office and salesroom is at 158 State street.

R. M. Yale occupies one floor 30x65 feet, in a four story brick building, located at No. 14 Commercial street, for the manufacture of sails, tents and awnings of every description. He commenced business in 1847, and employs five persons.

Wilder, Estabrook & Co. occupy three floors, 120x28 feet each, in a five story granite building, located at No. 7 Commercial street, and manufacture cigars. They are also importers and dealers in cigars and leaf tobacco. They commenced business in 1848, employ from 60 to 80 hands, and turn out about 3,000,000 cigars annually.

CLARK BREWER & SONS occupy 5 rooms, 30x70 ft. each; also 40x60 ft. in a 4 story granite building, located at No. 14 South Market st., for the manufacture of cigars, snuff, smoking and plug tobacco. The business was established by Mr. Brewer in 1812. This firm employs 40 hands, and turns out about 1,000,000 cigars, 70,000 to 80,000 lbs. of smoking tobacco, and about 20,000 lbs. of plug tobacco annually.

J. MORRILL & Co. occupies a three story brick building, 40x160 feet, located on Albany street, for the manufacture of candles and hard soap. They commenced business in 1848, employ 20 hands, and turn out about 800,000 pounds of candles, and about 1,000,000 pounds of soap annually.

LOUIS GRAVEUR occupies a room 10x20 feet, in a four story brick building, located at No. 42 North Market street, for the manufacture of cigars. He commenced business in 1865; has two employees, and turns out about 70,000 cigars annually.

COLLAMORE & Co. occupy two rooms, one 25x60 feet, and one 20x20 feet, in a four story brick building, located at No. 26 North Market street, for the manufacture of wood saws and boot polish blacking. They commenced business in 1862, and have 4 employees.

A. GORHAM occupies a room 20x40 feet, in a five story brick building, located at Nos. 130 and 132 State street, for the manufacture of blank books. He commenced business in 1849, and has 6 employees.

CLAPP & PUTNAM occupy two floors 24x95 feet each, in a five story granite building, located at No. 21 Commercial street, for the manufacture of sails. Commenced business in Dec., 1866, and employs 5 hands.

THE CRESCENT MINERAL SOAP MANUFACTURING CO., office No. 156 State street, occupy a 2½ story wooden building, located on Kemble street, for the manufacture of mineral soap, for cleaning all kinds of tin, earthern and iron ware, cooking stoves, marble tables, &c. The business was established in June, 1868. They employ 5 hands, and turn out about 10 tons of soap per week.

BOWEN & ERICKSON occupy one floor, 20x60 feet, in a 4 story brick building, located at No. 18 North Market street, for the manufacture of awnings, tents, wagon covers, boat sails, canvass signs, &c. They commenced business in October, 1868.

ALEXANDER CAMPBELL occupies 3 floors, 25x80 feet, in a four story brick building, located at No. 14 North Market street, for the manufacture of tin cans of all descriptions. He commenced business in 1866, and employs 12 hands.

WEBSTER & LADD have a saleroom at 230 Friend street, for the setting up of their patent adjustable spring bed. The manufacturing part, such as getting out the springs and slats, they let out to different parties. They turn out in this manner about 150 beds per week. They commenced business in 1865.

CHANDLER & COUZENS occupy two rooms, 25x96 feet each, in a five story granite building, located at No. 27 Commercial street, for the manufacture of sails. They commenced business in 1856, and employ 4 workmen.

GEORGE KINGMAN & Co. occupy one room, 25x96 feet, in a five story granite building, located at No. 31 Commercial street, for the manufacture of sails. He commenced business in 1833, and employ 3 hands.

B. F. BROWN & Co. occupy a four story brick building, 21x50 feet, located at Nos. 133 and 135 Fulton street, for the manufacture of blackings, dressings and varnishes for leather. The business was established in 1842, and now gives employment to 15 persons. Their machinery, that adapted to the business, is driven by an engine of 4 horse power.

JOHN HALL & SON occupy a one story wooden building, 60x16 feet, located at No. 25 South Margin street, for the manufacture of globe valves, water gauges, gauge cocks, unions, &c. Also, brass and composition castings. They commenced business in December, 1867; employ 7 hands, and turn out about 700 lbs. of castings per week. Their machinery is driven by an engine of 4 horse power, built at the Charles River Iron Works, Cambridgeport, Mass.

J. W. BUXTON occupies 2 floors, 25x50 feet in a four and a half story brick building, located at No. 107 Fulton street, for the manufacture of morocco leather. He commenced business in 1867, and employs six hands, runs one glazing machine, driven by an engine of 4 horse power.

B. FAULKNER occupies the fourth floor of a five story iron front building, located at No. 120½ Fulton street, for the currying of leather for boots and shoes. He commenced business in October, 1868, and has 12 employees. His machinery, consisting of glassing, pebbling, splitting, stuffing and polishing machines, is driven by steam power.

BAYNALL & LOUD occupy a four story brick building, 21 x50 feet, located at No. 139 Fulton street, for the manufacture of Waterman's patent ship and pully blocks and wooden pumps. The business was established in 1842, and gives employment to 18 persons. Their machinery, consisting of 1 irregular moulding machine, 8 lathes, 3 boring machines, 2 saws and benches and 2 jig saws, is driven by an engine of 10 horse power, supplied with steam from a boiler of 15 horse power.

D. P. NICHOLS occupies a four story wooden building, located at No. 118 West Brookline street, for the manufacture of carriages. He commenced business in 1867 and employs about 20 persons.

J. HARDING & Co. occupy a room 25x30 feet in a four and a half story brick building, located at No. 107 Fulton street, for the manufacture of inner soles for boots and shoes. They established business in May, 1868, and have 4 employees.

RICHARD R. ALEXANDER occupies a room, 25x48 feet, in a four story brick building, located at No. 190 Commercial street, for the manufacture of sails. He commenced business in 1865.

FRANK GARCIA & Co. occupy a room, 22x100 feet, in a five story granite building, located at No. 134 Commercial street. They manufacture cigars and employ 4 persons.

JOSEPH CAREW occupies two floors 40x36 feet in a four story brick building, located at No. 502 Tremont street, for the manufacture of statuary and monumental work from all kinds of approved stone. He commenced business in 1842, and employs about 16 hands.

THE FLORENCE LEAD CO. are quite extensive manufacturers of ground white lead and zinc paints; also, the fine colors used in the painting business. The manufactory is located on Portland and Merrimac streets in the building known as the Old Distillery building. They produce nine tons of paint per day. Their office and salesroom is situated at No. 8 India street.

PARKER & SLEEPER occupy a four story brick building, containing about 36,000 square feet of room, located at No. 10 Traverse street, corner of Portland, for the manufacture of furniture wood, wood hangings, furniture and piano forte veneers, and are also dealers in mahogony and fancy woods. The business was established in 1849 and now employs 17 hands. Their machinery is driven by an engine of 80 horse power, built by George F. McLauthlin of this city.

G. A. MILLER & Co. occupy three floors 100x50 feet each in a four story brick building, located at 702 Washington street, for the manufacture of piano fortes. The busi-

ness was established in 1854, and now gives employment to 10 hands, besides a large amount of work done outside their works by contract. They turn out about 8 instruments per week.

JOHN GOLDSMITH & Co. occupy four rooms containing about 600 square feet, in a two story wooden building, located at No. 213 Harrison avenue, for the manufacture of cigars. They commenced business in 1866, and employ 4 hands. They have a salesroom located at the corner of Washington and Dover streets.

THE BOSTON CHAIR CO., incorporated in 1855, occupy a four story brick building, 60x80 feet, located at Nos. 22, 24 and 26 Way street, for the manufacture of fine cane seat chairs, and employ about 120 hands. Their machinery, that adapted to the business, is driven by an engine of 60 horse power, built by Mr. Southworth of this city.

P. SCHUETTLER & SON occupy three floors, 35x120 feet, in a four story brick building, located at No. 1049 Washington street, for the manufacture of organ and melodeon keys. He commenced business in 1852, employs 25 hands and turns out about 1,200 sets per month. His machinery is driven by an engine of 8 horse power, built by Rawson & Hutchinson, of Cambridgeport, Mass. Mr. Whitney also has a factory at Fitchburg, used in getting out work from the rough stock.

LORENZO MATT occupies two floors, 40x50 feet each, in a four story brick building, located at No. 200 Tremont street, for the manufacture of piano fortes. He commenced business in 1850 and employs 10 hands for putting together and finishing the work, a part of it being done by contract by other parties. Mr. Matt has a patent united double sounding board, patented December 31st, 1867, which is considered superior to any in the country for giving quality and quantity of tone.

MCCLELLY & GOLLEY occupy 2 floors containing about 6,000 square feet of room in a five story brick building located at the corner of Merrimac and Causeway streets, for the manufacture of French parlor furniture and frames. They commenced business in 1863, and employ 25 hands. Their machinery, consisting of 2 moulding machines, 4 saws, 1 boring machine, and sole planer, is driven by Perkins & Washburn's steam engine, in another part of the building. This firm do business of from $80,000 $40,000 per annum.

BAILEY, CHANEY & CO. occupy about 9,000 square feet of room in a five story brick building located at No. 35 Causeway street, and manufacture Bailey's iron and wood planers, also, cutter scrapers and spokeshaves. They commenced business in 1867, and have 25 employees. An engine of 10 horse power built by George F. McLaughlin, of this city, supplies the power.

HUTCHINSON & RICKER occupy two rooms 100 x 25 feet each in a five story granite building located at No. 14 Commercial street, for the manufacture of safes. They commenced business in 1865, and have 6 employees.

J. L. & R. H. MCLAUGHLIN occupy a room 35 x 70 feet in a five story granite building located at No. 77 Commercial street, for the manufacture of safes. They commenced business in 1866, and have 8 employees.

JAMES L. TYLER occupies 4 floors, each 70 feet square, in five story brick building located at No. 280 Hanover street, for the manufacture of trucks, cabins and lines. He commenced business about 18 years since, and has 35 employees. His salesroom is at 47 Union street.

J. WINCHEST occupies a one story wooden building 15x80 feet, located at No. 57 Sabbatian street, for the manufacture of steel and iron vises. He commenced business about 20 years since, and has 2 employees.

WM. B. BARTLEY occupies about 1,500 square feet of room in a two story wooden building located at No. 68 Harrison avenue, for the manufacture of monuments and marble work generally. He commenced business in 1858. Has 6 employees, and does business to the amount of $8,000 per year.

HENRY N. STONE occupies about 10,000 square feet of room in a brick building located at Nos. 132 Commercial street, for the manufacture of pumps and wharf fixtures; also, brass and composition castings. He commenced business in 1862, and has 22 employees. His machinery is driven by an engine of 10 horse power of his own manufacture.

LAMPRELL & MATHEU occupy 2 floors 40 x 50 feet each in a 2½ story wooden building located at No. 317 Commercial street, for the manufacture of flags, Dallas awnings, boat cushions, wagon covers, tents, carpets, street signs, and decorations of all kinds. They commenced business in 1853, and employ 6 hands.

OLIN W. MERRIAM & CO. occupy 3 wooden buildings located on Main street, Tewksbury, Mass. Also, a brick building containing 28,000 square feet of room, situated at No. 269 Friend street, in this city, and manufacture ornamental chamber furniture and chairs. They commenced business in 1842, and have 60 employees. They have an engine to each of their factories of 18 horse power, which drive their machinery.

JOHN FOGUE occupies about 10,000 square feet of flooring, situated at No. 400 Charles street, for the manufacture of building stone and ornamental work. He commenced business in 1842, and employs about 30 hands.

HALE & FULLER occupy one floor, 81x47 feet, in the brick building situated at No. 141 Merrimac street, for the manufacture of wooden boxes of every description. They commenced business in January, 1868, and have 7 employees.

C. A. BALDWIN occupies a room, 20 x 20 feet, in a three story brick building, located at No. 226 Friend street, for the manufacture of shims for barrels, of which he turns out about 400,000 per year, having been engaged in this business since 1864.

RANDALL BROS. occupy about 1,200 square feet of room in a three story wooden building located at No. 87 Causeway street, for the manufacture of trunk racks and cabinet work. They commenced business June, 1868, employ 4 hands, and do a business of from $8,000 to $6,000 per annum. Their power is furnished from an engine in building adjacent.

DENNIS O'SULLIVAN occupies a room 24x60 ft., in a three story wooden building, located at No. 181 Portland street, for the manufacture of saddles, collars, and shoulder pads. He commenced business in 1864, and employs 3 hands. His salesroom is at No. 122 Court street.

E. J. MOULTON & CO. occupy a two story brick building, located at No. 10 East street, for the manufacture of sperm, whale, lard and elephant oils. The business was established in 1808, and employs six hands. They have facilities for running one about 150,000 gallons annually. Their office and salesroom is at No. 71 North Market street.

JOSEPH MAINE occupies a room, 40 x 60 feet, in a three story brick building located at No. 9 Silas and Leather st., for the manufacture of the cases to all descriptions. He commenced business in 1865, employs five hands and turns out about 20,000 per week.

CHADBOURNE & RUSSE occupy 9,200 square feet of room, in a brick building, located at No. 301 Merrimac street, for

the manufacture of jig saw frames; also, patterns and models. They commenced business in 1864, and have seven employees. Their machinery is driven by an engine in building adjacent.

Pickens & Washburn occupy about 4,500 square feet of room in a five story brick building, located at the corner of Causeway and Merrimac streets, for the manufacture of mouldings of all descriptions. They commenced business in January, 1866, and employ 30 hands. Their machinery is driven by a 40 horse power steam engine built by Harrison Loring, of this city. They do a business of $100,000 per annum.

Kemp & Benson occupy three floors, 25x100 feet each, in a five story granite building, located at No. 35 Commercial street, for the manufacture of sails and awnings. They commenced business in 1856, and employ five hands.

Delano & Taylor occupy two rooms, 40x80 feet, each, in a four story granite building, located at No. 6 T wharf, for the manufacture of sails. They commenced business in 1865, and employ three hands.

S. W. Clifford occupies four floors and attic 25x90 feet each in a five story granite building, located at No. 57 Commercial street, for the manufacture of essences, syrups, coldials, &c. The business was established in 1839, and employs four hands.

A. W. Mitchell & Co. occupy a room 14x25 feet, in a four story brick building, located at No. 9 Change avenue, for the manufacture of steneil and door plates of every description. They commenced business in 1864, and employ four persons.

Wm. B. Preston occupies two floors 25x40 feet each, in a three story brick building, located at No. 20 Faneuil Hall Square, for the manufacture of balances, platform and counter scales, and butchers' steelyards. He commenced business in 1850, and employs four hands.

B. F. Bennett & Co., successors to S. G. Simpkins & Co., occupy two rooms 30x50 feet each, in a six story iron front building located at Nos. 114 and 116 State street, for the manufacture of blank books of every description. The business was established in 1853, and employs about twenty hands.

Pearson Bros. & Co. occupy a large $3\frac{1}{2}$ story brick building, with a rope-walk attached built of wood, one quarter of a mile in length; also, several wooden buildings used as a machine shop, store house, &c., &c., located on Norfolk avenue, and built in 1850. They manufacture Manilla, Russian and American hemp cordage. They employ upwards of 100 hands, and turn out about 100 tons of rope per month. Their machinery is driven by an engine of 100 horse power, built by Aquila Adams, of this city.

The American Water Wheel Co. occupy about 9,000 square ft. of room in a 3 story wooden building located at No. 387 Federal st. for the manufacture of Warren's turbine water wheel and turbine regulator, on which they have taken out two patents; one in 1858, and the other in 1860. They also have been awarded a silver medal from the Mechanics Charitable Institution held in this city, in 1856 and 1860.

E. B. Vannevar & Co. occupy a $3\frac{1}{2}$ story brick building located at No. 58 Fulton street, for the manufacture of brass castings, Vannevar & Co.'s patent side light, coppersmiths', house and ship plumbing. They commenced business in 1860, and have 15 employees. Their machinery is driven by an engine of eight horse power, built by Mr. Fox, of this city.

E. W. Goddard occupies a two story wooden building, 30x40 feet, located at No. 27 Richmond street, for the manufacture of water casks, &c. He commenced business in 1864, as successor to Clapp & Goddard, who established the business in 1830. He employs seven persons.

D. McConologue occupies one floor, 35x60 feet, in a three story brick building located at No. 123 North street, for the manufacture of mineral and soda water, hop and mead beer. He commenced business in 1842, and has 10 employees.

Atkinson, Thayer & Co. occupy a three story brick building, 25x60 feet, located at Nos. 13 and 15 Ferry street, for the manufacture of cider and white wine vinegar. They commenced business in May, 1868, have 10 employees, and turn out 150,000 gallons annually.

J. J. Anderson occupies four floors 30x60 feet, in a five story brick building located at Nos. 138 and 140 Fulton st., for the manufacture of lounges and parlor furniture. He commenced business in 1865. Has 14 employees. His machinery is driven by an engine in building adjacent.

W. W. Webster occupies 2 rooms containing about 3,700 square feet, in a five story granite building, located at No. 73 Commercial street, for the manufacture of papier mache and composition carved ornaments. He commenced business in 1856.

Porter & Co. occupy 2 floors, 22x70 feet each, in a five story granite building, located at No. 130 Commercial street, for the currying of leather, for boots and shoes. They commenced business in April, 1866. Their machinery, consisting of pebbling and splitting machines, is driven by an engine in an adjacent building.

J. Broderick occupies 2 floors, 20x60 feet each, in a five story granite building, located at No. 130 Commercial street, for the currying of leather for boots and shoes. He commenced business in 1863, and has 10 employees.

Edwin Pinkham occupies two floors, each 42 feet square, in a four story granite building, located at No. 223 Commercial street, for the manufacture of sails. He commenced business in 1865, and has 6 employees.

Jonathan Pierce occupies a two story wooden building, 50x60 feet, located at No. 239 Commercial street, for the manufacture of pulleys, ships' blocks and pumps. He commenced business in 1848, and employs 3 hands.

Henry Amerige occupies a room 35x60 feet, in a four and a half story granite building, located at No. 1 Commercial wharf for the manufacture of sails. He commenced business in 1845, and employs 10 hands.

Wm. T. Norcross occupies one floor, 30x60 feet, in a two story wooden building, with a French roof, located at No. 297 Commercial street, for the manufacture of boats of all descriptions. He commenced business in January, 1862, and employs one person.

Joseph E. Silloway occupies 2 floors containing about 3,500 square feet, in a three and a half story wooden building, located at No. 317 Commercial street, for the manufacture of sails. He commenced business in 1858.

Joseph D. Clinkard & Co. occupy a three story wooden building, 40x60 feet, located at No. 221 Commercial street, for the manufacture of boats of all descriptions. They commenced business in March, 1868, and employ 3 hands.

Henry R. Clinkard occupies the second floor, 60x110 ft., of a three story wooden building, located at No. 421 Commercial street, for the manufacture of boats of all descriptions. He commenced business about 14 years since, and has six employees.

G. B. Holmes occupies one floor, 15x40 feet, in a two and a half story wooden building, located at No. 311 Commercial street, for the manufacture of wooden pumps and ships' blocks. The business was established by Samuel Hosea about 15 years since, and succeeded by the present proprietor in August, 1868. He employs one person.

DAVIS & HALLOWELL occupy two floors 25x60 feet each in a two story wooden building, located at No. 357 Commercial street, for the manufacture of soda and mineral water apparatus and copper work generally. They commenced business in 1864 and employ 8 hands.

GILSON & WALKER occupy a three story brick building 20x100 feet, located at No. 117 North street, for the manufacture of lasts and last trees. They commenced business in 1858 and have 20 employees. Their motive power is furnished by a 10 horse power engine, built by Wilson Adams & Co., of this city.

THE UNION PICKLE WORKS occupy a four story brick building, located at Nos. 15 and 17 Shed and Leather street, for the manufacture of preserved pickles, ketchups and sauces. The business was established in 1865.

W. C. BARTLETT & CO. occupy five floors 40x125 feet in a five story brick building, located at from 126 to 132 Fulton street, for the manufacture of white wire and sieve crapes. They commenced business in 1862 and have 28 employees.

CHARLES DAY & CO. occupy two floors 25x60 feet each in a 3½ story brick building, located at No. 304 Commercial street, for the manufacture of sash, tenis, awnings, and wagon covers. They commenced business in 1861 and employ 8 hands.

PALFREY & PRATT occupy a room 25x95 feet in a five story granite building, located at No. 81 Commercial street, for the manufacture of sash. They established business in 1850 and have 5 employees.

PALMER BROS. & LOTHROP occupy about 2,000 square feet of room in a five story granite building, located at No. 53 Commercial street, for the manufacture of sash. They commenced business in January, 1868 and employ 6 hands.

FOSTER & RUBY occupy a four story brick building 30x120 feet, located at Nos. 178 and 180 Commercial street, for the manufacture of brass and composition castings, ship fastenings, yellow metal and copper bolts, sheathing copper, &c. They commenced business in 1861 and employ 17 hands. Their machinery is driven by an engine of 8 horse power, supplied with steam from a 10 horse power boiler, built by Thomas Cunningham of Charlestown, Mass.

E. H. BEARDSLEE occupies a five story brick building containing 40 rooms, the average size of which is 30x40 feet, and located at the corner of Union and Friend streets, for the manufacture of every description of furniture. He commenced business in 1868 with a capital of $4[illegible], and now employs 75 hands, whose pay roll amounts to from $900 to $800 per week. He does business to the amount of $700,000 per annum.

WM. J. STEVENS commenced the manufacture of hard soap in 1862, as successor to Edmund Jackson, who established the business in 1856, and upon a two story wooden building, 27x30 feet, located on Parker street, and has two employees.

H. & G. W. LORD occupy 6,000 square feet of flooring in a granite building, located at No. 89 Commercial street. They manufacture oars and sculls, and employ 75 hands, running 30 looms, and producing 400,000 lbs. of sculling annually. This firm also occupy a two story wooden building located at Kennebunk, Maine, where they employ 40 persons in the manufacture of cotton twine. They commenced business in 1866, and produce annually 150,000 lbs. of twine. Their office and salesroom is at No. 89 Commercial street, Boston.

GEO. MATTHEWS & CO. occupy two floors 40x100 each in a five story granite building, located at No. 69 Commercial street, for the manufacture of sails. They commenced business in 1864, and employ six hands.

CHAS. H. SMITH occupies two rooms 40x100 feet each in a five story granite building, located at No. 70 Commercial street, for the manufacture of sails. He commenced business about 1868, and has five employees.

C. & G. HOOD occupy a five story brick building, containing about 15,000 square feet of floor room located at No. 20 Custom House street, for the manufacture of ice cream, for shipping purposes, also, druggists' ware, &c. They established business in 1849, employ 20 hands, and do business of about $100,000 per annum.

J. DUNHAM occupies two rooms 40x100 ft. each, in a 3 story wooden building located at No. 91 Commercial street, for the manufacture of sails. He commenced business in 1841, and employs five hands.

HOOPER, LEWIS & CO., successors to the late B. Loring & Co., who established the business in 1789, are manufacturers of every description of block tackle. They occupy a five story granite building, 50x40 feet, located at Nos. 120 and 122 State street, and have 15 employees.

EVERDEAN & CURRY occupy a room in a four story brick building, 40x60 feet, located at No. 251 Commercial street, for the manufacture of sails. The business was established by Mr. Everdean in 1852. Mr. Curry became a partner in 1867. They employ 7 hands.

CROCKER & OTIS occupy a room 25x80 feet, in a granite building, located at No. 105 Commercial street, for the manufacture of sails. They commenced business in 1841, and employ three hands.

A. B. & S. H. LORING occupy a two story wooden building, 20x80 feet, located at No. 76 Harrison avenue, for the manufacture of copper gutters, conductors, bolt and rivet boilers and bathing tubs. They commenced business in 1841, and have 16 hands. The stock converted by these operators is about $50,000 per annum.

WM. STEVENS occupies about 5,200 square feet of room, in a three story brick building, located at the corner of Cambridge and Grove streets, for the manufacture of church organs. He commenced business in 1858, has 12 employees, and turn out about 12 organs annually.

THE CALCUTTA LINSEED OIL WORKS, J. G. Whitney & Co., proprietors, established business January 1st, 1868. They occupy a five story brick building, 164x60 feet, located at Nos. 5 and 7 Sargent's wharf, and 23 and 31 Eastern avenue, and manufacture raw and boiled linseed oil, employing 35 hands. Their machinery consists in part of 4 hydraulic presses and 2 sets of stones. They also have to use 20 casks used for boiling, cooling and weighing their oil, of which they turn out 1,000 gallons per day, and about 10 tons of cake, the greater part of this latter article being shipped to Europe. Their motive power is driven by an engine of 20 horse power, built by the Corliss Steam Engine Co. of Providence, R. I. Their office and salesroom is at 44 K. by street. M. Field Fowler is Superintendent of this company.

THE BOSTON GRIT FLOUR MILLS, Morse & Ellms, proprietors, occupy rooms in a four story granite building, located at from 47 to 49 Commercial wharf, for the manufacture of flour. Have 12 runs of stones, and turn out about 450 bbls. per day, and have a capacity for doing double that amount of business. Their machinery is driven by an engine of 20 horse power.

F. C. DEERE occupies a four, 40x60 feet, in a two story wooden building, located on Sweet street, for the manufacture of all kinds of packing boxes. He commenced business in May, 1868, employs 5 hands, turns out from 1,000 to 1,500 boxes per week, and consumes 10,000 feet of lumber per month, doing a business of $13,000 per annum. Motive power furnished from an engine in building adjacent.

J. N. Devereux occupies a room, 125x30 feet, in a five story granite building, located at No. 122 Central street, for the manufacture of sails, awnings, hammocks, tents, wagon covers, &c. He commenced business in 1847, and employs 8 hands.

Flint Bros. & Co. occupy a five story granite building, 40x60 feet, located at Nos. 50 and 52 Broad street, for the manufacture of spices and coffees. They commenced business in 1856. Their machinery is driven by an engine of 20 horse power, built by Campbell, Whittier & Co., of this city.

W. C. Hunneman, Jr. occupies three buildings, located on Swett street, for the manufacture of varnishes and japans. He commenced business in 1855 and has 3 employees.

D. Norton, Jr. occupies two floors, 60x43 feet each, in a four story brick building, located at No. 6 Row's wharf, for the manufacture of sails. He commenced business in 1845 and employs 10 hands.

John B. Baker & Co. occupy a three story wooden building, 34x34 feet, located at No. 2 Mason street, for the manufacture of fine harnesses, horse blankets, sole leather, trunks, valises, bags and riding saddles. They commenced business in 1835 and employ 50 hands. Their salesroom is at No. 150 Tremont street.

Holloway Bros. & Woodbury occupy two floors, 25x58 feet each, in a four and a half story granite building, located at No. 11 Commercial wharf, for the manufacture of sails. They commenced business in November, 1864, and have 4 employees.

J. H. McManus occupies a room 34x50 feet, in a granite building, located at No. 33 South Commercial wharf, for the manufacture of sails. He commenced business in 1856.

Francis & Lovell occupy four floors, 35x35 feet, in a four story brick building, located at No. 52 India wharf, for the manufacture of ship's blocks and pumps. They commenced business in 1829 and employ 2 persons.

Dix & Potter occupy a room 30x65 feet, in a three story brick building, located at No. 132 Broad street, for the manufacture of sails. Commenced business in March, 1866, and have 4 employees.

Chester Guild & Sons manufacture all varieties of shoe stock, harness, belting and military leather. The business was commenced in 1831, at Roxbury, but since removed to 107 Milk street, where they have extensive works, covering several thousand feet of land, and filled with machinery of the most improved patterns. They employ upwards of 100 hands, consume 3,000 cords of bark, producing 25,000 skins per annum.

The buildings are heated by steam from a 100 horse power boiler, built by Kendall & Roberts, of Cambridgeport, Mass, which also furnishes steam for a 40 horse engine, built by Cook, Rymes & Co., of Charlestown, Mass.

John B. Alley & Co., manufacturers of leather, employ 80 men, and do business of $300,000 per year. They occupy two buildings; one 50x120 feet, and the other 40 x 250 feet. Their machinery is driven by a 35 horse power engine, made by the Putnam Machine Co., of Fitchburg, Mass.

Roxbury Carpet Co., J. W. Blake, Treasurer. This company are manufacturers of tapestry, Velvet and Brussels carpeting. The power is furnished by a steam engine. Their selling Agent is M. H. Simpson, 127 Milk street, Boston.

Ames Plow Co., Worcester, Mass., and Groton Junction. This is an incorporated company, established under the general laws of Massachusetts. Capital $400,000. Oliver Ames, President; E. Tasker, Treasurer; H. C. Turner, Superintendent and Managing Director. They manufacture agricultural implements and machines, and are dealers in seeds of every variety. They employ 600 hands. The Ames Plow Co. are successors to Nourse, Mason & Co., and Ruggles, Nourse & Mason, by whom the business was established in 1835. Their productions are sent to almost every country in the world, and they claim that their exports are greatly in excess of any other house in the same line of business, in the country. They have a warehouse at Quincy Hall, over Quincy Market, in this city, and at No. 53 Beekman street, New York.

A. Weed & Co. are manufacturers of patent self-boring, self-closing faucets, for molasses, oils, liquors, &c. This business was established by A. Weed and S. P. Blake, in December, 1868. They occupy a building 50x75 feet, employ 6 men, consume 300 lbs. of iron per day, and do a business of $30,000 per annum. Their office is at 36 Chardon street.

A. Aldrich & Son established business in 1868. They occupy a two story building with basement, 100x36 feet, at 47 Pearl street, for the manufacture of boots and shoes. They employ 125 hands, and produce annually, 3,000 cases.

Geo. H. Dickerman, manufacturer of paper boxes, at Nos. 30, 32, 34 and 36 Greene street.

In 1855 Mr. D. commenced the business in a very small way, employing but two persons. He has now in his employ from 150 to 200 hands, and has the facility for doing a larger business than any other establishment of the kind in the United States.

He occupies a four story building, 75x180 feet, which he has filled with machinery for the making of boxes, driven by an engine of 12 horse power, made by R. W. Pratt, of this city. The engine is furnished with steam from a tubular boiler, built by Allen & Endicott. The building is heated by exhaust steam. An elevator, built by Allen & Endicott, of Cambridgeport, saves considerable labor, in carrying stock from one story to another.

Campbell, Whittier & Co. are manufacturers of steam engines and boilers, at 50 Friend street. This firm was established in 1845. They occupy a machine shop, 190x40 feet; boiler shop, 150 x60 feet; riveting tower, 20 feet square, 50 feet high; blacksmiths' shop, &c., &c. They employ from 100 to 125 hands. Their machinery is driven by an engine of 25 horse power, supplied with steam from a boiler 50 horse power, both of their own manufacture.

J. S. F. Huddleson, manufacturer of barometers, thermometers, hydrometers, &c., at 96 Washington street. Established in business in 1839. He employs five persons.

John Sowle & Co., manufacturers of looking glasses and duplex mirrors, occupy a two story brick building 60x20 ft., located at 101 Merrimac street, used for getting out stock, &c. Also, have a five story stone building 130x30 feet used in the finishing of their work, and for an office and salesroom, situated at 120 and 122 North street. They commenced business in 1831, and employ from 30 to 40 hands. The patent duplex mirrors made by them, consists of the arrangement of two mirrors, which when closed, occupy the space and present the appearance of but one, while by opening the frames, they are at once placed in such a position as to afford a complete view of the person, front, back and profile, and are especially adapted to ladies' use in dressing their hair. This firm have a salesroom at 12 West street; also, one at 825 Broadway, N. Y. They do business to the amount of $250,000 per annum.

O. F. Sage occupies three floors of a four story brick building, 80x20 feet, located at No. 546 Washington street, and manufacture trunks, valises and carpet-bags. The business was established in 1862 and gives employment to 35 persons. They do business to the amount of $125,000 per annum.

HICKS & BADGER,

MANUFACTURERS OF ALL KINDS OF

COPPER WORK,

Nos. 49 and 51 Pitts Street,

S. D. Hicks, }
E. B. Badger, }

BOSTON.

Hicks & Badger occupy 8,000 square feet of flooring, situated at Nos. 49 and 51 Pitts street, for the manufacture of copper work of every description. They commenced business in 1848, and have 10 employees.

The Union Button Hole Machine Co. occupy two floors and basement, 30x85 feet, in a four story brick building, situated at No. 30 Chardon street. The business is conducted by Kasimir Vogel, was established in 1864, and gives employment to 50 persons. They manufacture the Union Button Hole Machine and produce about 1,500 per annum. Also a new and useful invention called the Vogel attachment which is very simple, giving the opportunity to do common sewing and to be changed by half a minute to button holes, &c. Do business to the amount of $100,000 per year.

The American Horse Collar Co., manufacturers of patent rubber lined horse collars, saddles and pads. Commenced business in 1867. They occupy two floors of a six story granite building, 100x80 feet, located at No. 100 Milk street, employing 100 persons and producing about 1,500 dollars per week, doing business of $300,000 per annum. These collars are considered the best in market, inasmuch as they are not affected by cold or heat, are very elastic, and will not wrinkle. They are water-proof, will not harden, are at all times free from bunches and will not create sores on the horse. Their leading qualities are not surpassed by anything now in use. This company have factories located in Chicago, New York and Baltimore.

N. M. [illegible], manufacturer of all kinds of machinery, occupies one floor, 75x30 feet, in a six story brick building, known as "[illegible] Building," and located at No. 79 Sudbury street. He commenced business in 1862 and has 15 employees. His motive power is furnished from an engine in building adjacent.

The American Steam Gauge Co. occupy two floors, 98x30 feet, in a six story brick building, located at No. 3 [illegible] street, and manufacture Bourdon's patent steam gauge, Lane's improvement on the Bourdon; also E. G. Allen's patent steam gauge, formerly made by the National Steam Gauge Co. They commenced business in 1854, have 40 employees and turn out about 100 gauges per week. George H. Fox is President, A. N. Clark, Treasurer, and H. K. Moore, Superintendent, of this company. Their office is at 44 Congress street.

G. [illegible] & Co. occupy 2 rooms, 70x30 feet, in a three story brick building, located at 116 Union street, for the manufacture of wire cloths, sieves, foundry riddles, and every variety of wire work. They commenced business in 1863, employ 7 hands, and consume one ton of iron wire per month, and two tons of brass wire per year; do a business of $20,000 per annum.

Noah Davis & Co. occupy the second floor of a brick building, 30x25 feet, located at 39 Charlestown street, for the manufactory and dealing in combination of fine old Mocha and government Java coffees. They do a business of $25,000 per annum.

The Proprietors of the Leavitt Sewing Machine occupy the 3d floor, 40x50 feet, of a five story brick building, known as [illegible] block and located at No. 11 [illegible] st., for the manufacture of the Leavitt sewing machine, of which they turn out 30 machines per month. They commenced business in 1850 and have 20 employees. Their machinery, consisting of 20 lathes, 2 planers, 4 milling machines, 3 drilling machines, 2 polishing machines, 1 [illegible] machine, and one punching machine, is driven by an engine of 10 horse power, in building adjacent. Their office is at 114 State st.

[illegible] & Harrington occupy a room 40x40 feet, in a six story brick building located at 71 Sudbury street, for the manufacture of [illegible], of all kinds and sizes. The business was commenced in January, 1868, employ 4 hands. Power is furnished from an engine in building adjacent.

Henry B. [illegible] occupies a two story wooden building, 20x40 feet, located on 183 Friend st., for the manufacture of harnesses of every variety. He commenced business in 1841, and employs from 5 to 10 hands. He is also sole agent for the New England States, for the sale of the patent harness [illegible].

Wm. S. [illegible] occupies 4 floors, 20x45 feet, in a four story brick building, located at No. 9 Change avenue, for the manufacture of cigars and leaf tobacco. He commenced business in 1856, and employs 8 hands.

Sargent & Ham occupy a three story wooden building, 100x40 feet. Also, two rooms in building adjacent, one 100x30 feet, the other 80x30 feet, located at 57 and 59 Sudbury street, for the manufacture of carriages. They commenced business in 1853, employ 30 hands, turn out 4 carriages per month, and do business to the amount of $60,000 per annum.

Moses Pond & Co., 79 and 81 Blackstone st., Boston. This old and well known house, whose stove products are famous, stands in the front rank of manufacturers of ranges, furnaces, hot air registers and stoves, has been in existence nearly six and forty years.

It was established in 1826 by Moses Pond, who still continues at its head. His senior partner, Henry E. Tucker, has been with this house thirty-six years, i. e. since 1837.

Half a century ago, when [illegible] by its extensive business, nearly all American stoves were made in [illegible], and embraced but a few varieties of very simple cooking and heating stoves.

The range and furnace business has all grown up since, and the number of patents issued to Mr. Pond during thirty or forty years for different ranges and furnaces invented by him, together with the many thousands made and sold during this time, will attest the part this firm has taken in perfecting this important trade.

Their wares are known and used, not only throughout the Union, north and south, and on the Pacific, but extensively in the Canadian Dominion, the West Indies, the East Indies, the Sandwich Islands, China, and in many other quarters. *All* their goods are finished at the extensive Boston establishment, the castiugs being made at the foundries in New Bedford, Mass., and South Newmarket, N. H.

The Boston Stereotype Foundry was established in 1822, and was soon after organized under an act of incorporation by the name of the Boston Type and Stereotype Foundry. In 1823, the establishment having outgrown its accommodations in Howard Place, was removed to a more commodious building in Salem street, at the north end, where, in 1825, it met with a disastrous fire, which nearly consumed it, the loss being estimated at more than $30,000. However, it was refitted with the least possible delay, the capital stock being fixed at $75,000; one thousand shares at $75 each.

In 1829 it being desirable that the establishment should be located near the business centre of the city, it was removed to Congress street, and soon after another removal was made to Minot Building, corner of Spring Lane and Devonshire street, where it has since remained. In 1849 a company of practical workmen arranged for the purchase of the stereotype department, the business of which they have since successfully carried on, having become incorporated March 28th, 1849, as the Boston Stereotype Foundry, the Boston Type Foundry retaining the old charter.

They occupy three floors of the building, with steam power, and employ from 40 to 50 workmen. The proprietors of this foundry were the first to adopt the process of electrotyping to book work. A Catholic Prayer Book, entitled St. Joseph's Manuel, published by Patrick Donahoe in 1853, was the first work of any considerable size electrotyped in the United States. Since that time the electrotype process has been extensively used by them, and among the large number of works produced, may be mentioned all of Worcester's Dictionaries, from the primary to the quarto; and also Webster's Unabridged quarto. The annual manufacture of plate (stereotype and electrotype,) amounts to about $60,000.

The Patent Wood Saw Co. occupy 3 floors, 25x50 feet each, in a brick building, located at No. 11 Batterymarch street, for the manufacture of patent framed wood saws, and Hayward's patent folding saw buck. They commenced business in 1860; employ 20 hands, turn out 300 saws per month. They have facilities for making a large number of Hayward's patent saw buck, which patent was granted December 11, 1866. They are gaining favor rapidly, and soon will supersede any other saw buck in this country. This firm do a business of $35,000 per annum.

Maurice Eller occupies 720 square feet of room in a 4 story brick building, located at No. 168 State street, where he employs 35 hands, in the manufacture of cigars, of which he turns out 20,000 per week. He is also an importer of cigars, and dealer in leaf tobacco.

A. Wentworth & Co. occupy about 18,000 square feet of land, located at Nos. 17 and 60 Haverhill street, where they employ 225 hands in the manufacture of monuments, chimney pieces, grave stones, table and counter tops, soap stone work, &c. This business was commenced about 33 years since by Mr. Wentworth, and was changed to the firm name of A. Wentworth & Co. in 1854. Their works are driven by steam, requiring about 100 horse power. They do business of about $75,000 per annum.

C. Russ & Co. occupy a four story wooden building, 72x 34 feet, with a wing attached, 80x26 feet, 2 stories, for the manufacture of coaches, barouches, and all kinds of heavy carriages; located at No. 263 Northampton street. They commenced business in 1857, have 24 employees, and turn out about 25 carriages per annum, varying in price from $1,400 to $2,000. They do business to the amount of $20,000 per annum.

The Boston Steam and Gas Pipe Works, Braman, Dow & Co., Proprietors, occupy a four story brick building, 50x 30 feet. Also, a storehouse, built of wood, 50 x 22 feet, located at Nos. 3 and 4 Haymarket square. They manufacture wrought iron steam and gas pipe, and brass and iron fittings of all kinds, for water and gas. They commenced business in 1851, employ 30 hands, and turn out 500,000 ft. of pipe annually, doing business of $200,000. They have a boiler of 15 horse power, of their own manufacture, used for heating their factory. Their motive power is furnished from an engine in building adjacent.

Valentine & Co. manufacturers of varnishes and japans, and Valentine's nonpareil coach and railway varnishes, commenced business in 1832. Their factory is located at Riverside, Mass., where they occupy about two acres of ground, employing 16 hands, and producing 10,000 gallons of varnish per month, and do business amounting to $250,000 per annum. Their office in Boston is at No. 32 Kilby street.

Joseph Zane & Co. occupy 2 floors of a three story brick building, located at 81 Sudbury street, for the manufacture of self-closing safety faucets, and all kinds of plumbers' stock. They commenced business in 1844, employ 12 hands, and do business amounting to $40,000 per annum.

Eaton, Jones & Co. occupy a five story brick building, 20x65 feet, located at 5 and 6 Holmes block, Haymarket square, for the manufacture of wooden ware, children's carriages, &c. They commenced business in 1849, and employ from 20 and 30 hands.

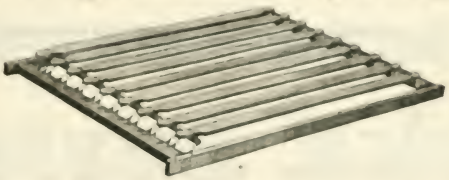
John W. Hodgedon manufactures fine pocket books, bill books, letter and card cases, &c., at No. 54 Kilby street. He commenced business in December, 1867, and employs 12 persons.

Dexter Chase occupies 3 rooms, covering 2,200 square feet of flooring, in a two-story brick building located at the corner of Broadway and Mt. Vernon streets, Lowell, Mass., for the manufacture of Chase's patent spring beds. The business was commenced in 1867 and gives employment to 8 persons, who turn out monthly 1,200 beds. This bed wherever exhibited has received the highest premiums, and at the Mechanics' Fair held in Lowell, a silver medal was awarded at their exhibition in September and October, 1867. The machinery used is driven by an engine of 80 horse power, built by the Atlantic Works of Boston, which also furnishes steam for all parts of the building. Does a business of $65,000 per annum. Office and salesroom, No. 22 Milk street, in this city.

Wheeler Cartwright occupies a wooden building, 70x 70 feet, located on Norfolk avenue, for the manufacture of all kinds of blacksmiths', machinists' and stone cutters' tools. Commenced business in August, 1868, and employs 25 hands. The machinery, consisting of 1 steam dudgeon hammer, 1 engine lathe, 1 planer, 1 drill and 1 trip hammer, is driven by an engine of 15 horse power, built by Allen & Endicott, of Cambridgeport, Mass., with one flue boiler, built by McKay & Aldus, of East Boston. He does a business of $100,000 per year.

Francis McLaughlin occupies three floors, 48x150 feet each, in a four story brick building, located at No. 290 Commercial street, for the manufacture of all kinds of brushes. He commenced business in 1848 and has 114

Chase's Patent Spring Bed.



Patented December 20, 1864, and June 12, 1866.

The extraordinary success of Chase's Patent Spring Bed is chiefly attributable to a few facts, viz.:

The simplicity of its Construction and its Durability; its Easy and Noiseless Action; the Independent Action and Sufficient Length of each Slat; the absence of rivets and sharp corners to wear the Mattress; the Reversibility of the slats, and the ease of any skilful young person to operate.

The Bed has been awarded the Highest Premium at every Fair where it has been placed in Exhibition.

The last Mechanics' Fair, held in Lowell, Mass., giving it the PREFERENCE OVER FIVE other Spring Beds there exhibited.

THE TRADE AND THE PUBLIC GENERALLY,

Where the Bed has been introduced and used, cheerfully bear testimony to its being what it is claimed to be—

The Best Longitudinal Slat Spring Bed in the Market.

All orders will be promptly answered by addressing

(*Manufactory at Lowell, Mass.*) DEXTER CHASE, 22 Milk Street, Boston, Mass.

employees. His machinery is driven by a 10 horse power steam engine, furnished with steam from a tubular boiler, 20 horse power, built by Chubbuck & Sons, of this city. Does business of about $220,000 per annum.

Phelps, Dalton & Co. occupy three floors, 150x38 feet each, in a five story brick building, located at 52 Washington street, for the manufacture of printing type. The business was commenced in 1836. They employ 180 hands and consume 10 tons of metal per month.

James E. Deland occupies two rooms, 24x80 feet, in a three story brick building, located at 159 Blackstone street, for the manufacture of trunks, valises, and traveling bags. He commenced business in 1861, employs 4 hands and turns out 30 dozen per month, doing business amounting to $12,000 per annum.

G. W. Williams & Co. occupy three rooms, 80x45 feet each, in a six story stone building, located at No. 11 Battery-march street, for the manufacture of stencil plates and tools of every description. They commenced business in 1868, employ 8 hands and have a capacity for cutting five thousand letters per day.

Murray Oakes & Co. occupy a five story brick building, 30x80 feet, located at No. 6 Charlestown street, where they employ from 10 to 12 hands for the manufacture of gas fixtures. They commenced business in 1861. Their machinery is driven by an engine of 40 horse power, in building adjacent. They do business of from $20,000 to $25,000 per annum.

J. L. Eastman occupies a room 30x25 feet, in a four story brick building, located at 73 Haverhill street, where he employs five hands for the manufacture of steam gauges.

Cann & Bagnall occupy two rooms, each 40x45 feet, in a four story brick building located at 78 Haverhill street, where they employ six hands for the manufacture of all kinds of candy. The business was commenced in 1863. They now consume 200,000 pounds of sugar per month, and turn out 240,000 lbs. of candy per year, doing business amounting to $60,000 per annum.

Wm. O. Haskell & Son occupy a five story brick building, 156x22 feet, located at 34 Canal street, as their office and salesroom. They also occupy a factory 100x40 feet, with lumber house, saw mill, dry kiln, &c., covering 12,000 feet of land, located at East Ledyard, N. H., for the manufacture of school furniture, settees, Crane's patent folding reversible recitation desks, wash benches, step ladders, tables, stools, &c. They commenced business in 1851, and employ 60 hands. Their machinery is driven by three water wheels—one of which is four feet, one 2 feet, and the other 3½ feet. They do business of $30,000 per year.

Crane, White & Co. occupy a five story brick building, located at 14 Canal street, for the manufacture of paraffine and manufactory oils. They commenced business in April, 1865, and employ five hands.

E. Whittlesey occupies three floors of a four story brick building, 60x70 feet, located at 81 Charlestown street, where he employs from 15 to 20 hands in the manufacture of steam warming and cooling apparatus, boilers and furnaces for warming buildings by low pressure steam, or hot water with all the latest improvements. He commenced business in 1852. His machinery is driven by an engine of 60 horse power in a building adjacent.

James L. Tyler, occupies three floors 40 x 50 feet in a five story brick building, located at the corners of Chardon and Haverhill streets, for the manufacture of trunks and valises. He commenced business in 1848; employs thirteen hands and does a business amounting to $45,000.

HILL & WRIGHT,

145 & 157 SUMNER ST., E. BOSTON, MASS.,

COOPERS,

Manufacturers and Dealers in every description of

Casks, Barrels,

Etc., etc. New and Second-Hand Flour Barrels and Half Barrels. Flour Barrel

SHOOKS.

SUGAR BARRELS, NEW AND SECOND-HAND WATER AND OIL CASKS, SQUARE WATER TANKS, HARNESS CASKS, BUCKETS, KEGS, &C. RED AND WHITE OAK SHOOKS, OF EVERY KIND,

MADE TO ORDER.

Having facilities for business unsurpassed in New England, we can furnish any article at the shortest notice, and at the **Lowest Price.**

HENRY B. HILL. GEORGE WRIGHT.

Hill & Wright occupy 2 four story wooden buildings, 32x90 feet each. One, used for the manufacture of casks of every description, located at Nos. 145 and 157 Summer st.; and the other for the manufacture of flour barrels, also located on Summer street. They established business in 1857, and have 45 employees.

Aldrich, Kendall & Rice occupy a four story brick building, 75x50 feet, located at No. 4 Charlestown street, and used as their salesroom. They also have a factory located at South Boston, which is a 2½ story wooden building. They manufacture walnut, chestnut and painted chamber furniture, what-nots, hat trees, &c.

They commenced business July, 1868, and employ twenty hands.

E. G. Wright & Co., occupies 600 square yards of flooring in a five story brick building, located at 71 Sudbury street for the manufacture of musical instruments, of every description. They commenced business in 1860; employ thirty hands and turn out from $50,000 to $60,000 worth of instruments per year.

Geo. Springall & Co., occupy two floors 30 x 40 feet, in a five story brick building located at Nos. 1 and 3 Sudbury street, for the manufacture of fine harnesses. They commenced business in 1846, and employ 12 hands.

J. D. Pierce & Co. occupy one floor of a two story wooden building 80 x 25 feet, located at No. 4 Taber street, for the manufacture of sleighs, carriages and carriage wheels, They commenced business in 1863, and employ 4 hands.

S. Jackson, Jr., manufacturer of the patent excelsior trunk, also valises and carpet bags, commenced business in 1862. He occupies two floors in a three story building, 90x 25 feet, located at 1875 Washington street. He employs 8 hands, doing business to the amount of $75,000 per annum.

F. B. Wallis occupies four rooms, 20 x 15 feet each, in a four story brick building located at 62 Kilby street, for the manufacture of the Boston over-gaiter, and ladies', misses' and children's leggins. The business was commenced in 1846. He employs 20 hands, and has a capacity for turning out 50 pairs of gaiters per day.

Wm. B. D. Simmons occupies a five story brick building 80 x 50 feet, located at the corner of Charles and Cambridge streets, for the manufacture of church organs. He commenced business in 1846, and employs 40 hands.

W. S. & F. Cordingley occupy a stone building 25 x 75 feet for the manufacture of shoddy; also occupy a two story stone building 25 x 160 feet, used for wool washing, sorting, and boiling. They commenced business in 1865, and have 10 employees. They have in use a tubular boiler of 40 horse power, made by Chubbuck & Sons of Boston, a breast wheel 15 feet wide, 18 feet diameter, drives their machinery. Their office is located at 409 Broad street.

S. E. Chubbuck & Sons manufacture steam engines, boilers and machinery. Their machine shop is 2 stories high, 36x100 feet. The boiler shop in the rear is 80x30 ft. The business was established in June, 1859, with a capital of $35,000. They employ 40 persons, producing $10,000 worth of work per month. An engine of 20 horse power, supplied with steam from a tubular boiler, both of their own manufacture, furnish the motive power.

Shales & Co. occupy 2 floors of a 3 story wooden building, 80x30 feet, located on Eustis street, for the manufacture of black walnut chairs and sofas. They commenced business in 1868, employ 15 hands, turning out 8 sets per week. Their machinery, consisting of moulding machines, saws, lathes, &c., is driven by an engine of 40 horse power in building adjacent.

BOSTON FORGE COMPANY,

MAVERICK STREET, EAST BOSTON,

MANUFACTURERS OF

RAILROAD WORK:

Locomotive Frames, Axles, Cranks, Piston and Connecting Rods, Truck and Car Axles, &c.

STEAM MARINE WORK:

Shafting, Cranks, Cross-Heads, Beam-Straps, Wheel-Arms, Connecting and Piston Rods, &c.

Anchors, Windlass Necks, Truss Shapes, Knees, Davits, &c., &c., and

ALL KINDS OF HAMMERED SHAPES.

JAMES SMITH, Treasurer, at the Works, East Boston.

The Boston Forge Co. occupy a wooden building [illegible] x [illegible] feet, located on Maverick street, for the manufacture of railroad work, steam marine work, anchors, and all kinds of hammered shapes. They commenced business in 18[illegible], and employ 30 hands. They have in use three steam hammers, one 40 horse power. They also run a steam engine of 12 horse power, built by the Atlantic Works of this city, supplied with steam from two flue upright, and one tubular boiler, built by McKay & Aldus. They do business amounting to upwards of $1[illegible],000 per annum. James Smith, of East Boston, is treasurer, and Jonas H. Aiken, president.

Whitaker & Hammond, manufacturers of extra family and soda soap. Also, scouring and fulling soap, for woolen manufacturers. Commenced business in 1865. Their works are located at No. 4 Kemble street, and comprise a two story wooden building 85 x 60 feet. They employ 9 hands, consume 7,000 lbs. of grease and tallow, 3,000 lbs. soda ash, and 15 bbls. rosin per week, turning out 15,000 lbs. of hard soap, and 16,000 lbs. of scouring soap per annum; doing business of $80,000.

The New England Card Factory, E. Sargent Perkins, Proprietor. Established business in 1849, for the manufacture of card boards and cards, of every variety. He occupies a three story brick building, with basement, 100 x 50 feet, with a wing 32x30 feet, located on Vale street. The work on the cards is done mostly by machinery, driven by a forty horse engine, built by the Putnam Machine Co., of Fitchburg, Mass., furnished with steam from 2 tubular boilers 20 horse power, built by Campbell, Whittier & Co. of this city. He employs 70 hands, and turns out daily about 500,000 cards, doing business of $100,000 per annum. Office No. 88 Milk street.

R. W. Ames & Son occupy a four story wooden building, 90x28 feet, with an L 38x22 feet, 3 stories, located at No. 12 Hayden street, for the manufacture of patent enamelled split and grain leather. Have 40 hands, turning out about 600 sides of leather per week. The motive power is furnished from a 16 horse engine, built by Benjamin Anthony, of this city, furnished with steam from a cylinder boiler. They commenced business in 1864, and do a business of $100,000 per annum.

John Roessle occupies a three story brick building, 150 x 45 feet, located on Pynchon street, for the manufacture of lager beer. He commenced business in 1846, employs 10 hands and brews about 180 barrels per week. His machinery is driven by an engine of 12 horse power, furnished with steam from a 20 horse tubular boiler, made by Campbell, Whittier & Co., of this city. He does business amounting to $85,000 per annum. Office 101 Washington street.

McGuire & Fahey occupy a three story frame building, 100x30 feet, located at No. 258 Cabot street, for the currying of calf skins, employing 45 hands and finishing about 25,000 skins per annum. They commenced in 1864 and are now doing a business of $75,000. Their machinery, consisting of rolling, polishing and splitting machines, &c., is driven by an engine of 8 horse power, furnished with steam from a cylinder boiler, 12 horse power, built by Campbell, Whittier & Co., of this city.

Roxbury Steam Mill, Wm. Gray & Co., proprietors, are manufacturers of cotton goods. They commenced business in 1846 and occupy a four story brick building, 88x62 feet. Picker house, 32x31 feet. Boiler house attached to mill building, 45x26 feet, containing 4 boilers of 50 horse power each, 2 built by John Davis, Jr., and the others by Campbell, Whittier & Co., of this city. These boilers furnish steam for heating the building, also for driving their 150 horse power engine, built at Providence, R. I., by the Corliss Steam Engine Co. The boiler house also contains 2 Knowles & Sibley and 1 Farr's patent steam pumps, built by George Dwight Jr. & Co., of Springfield, Mass. This establishment is situated on George street. They run 4,840 spindles and 140 looms, 12 of which are for drilling. They have 125 employees and consume from 10,000 to 12,000 pounds of cotton per week, turning out 26,000 yards 4-4 sheetings per week. Also are turning out ¾ drillings. Office, 56 Summer street.

Sumner & Nichols occupy a three story frame building, 100x35 feet, located at No. 30 Norfolk avenue, for the manufacture of morocco leather, made exclusively of sheep skins, of which they turn out 100 dozen per week, employing 34 hands. They run a revolving polishing machine, capable of polishing 30 dozen skins per day. Their machinery is driven by a 16 horse engine, furnished with steam from a 16 horse tubular boiler, both built by Campbell, Whittier & Co., of this city. Office, corner of Pearl and High streets.

John Day occupies a three story wooden building, 90x45 feet, located at No. 11 King street, for the manufacture of silk fringes of all kinds; also, fine ribbons, tassels, tiers and silk fancy braids. He commenced business in 1857 and employs from 60 to 75 hands. His machinery is driven by a steam engine of 10 horse power, built by Thomas Lowell & Co., of this city.

ROWLAND HILL,

BRASS FOUNDER,

Head of Carlton Wharf, - - - - - - - - - - EAST BOSTON.

All kinds of Brass and Composition Castings made to order. Babbitt & White Metal constantly on hand.

ROWLAND HILL occupies a 2 story brick building, 18 x 38 feet, located at the head of Carlton's wharf, Summer street, for the manufacture of brass castings of all descriptions. He commenced business in 1867, and has 2 employees.

JAMES MORSE commenced business in 1860. He occupies a two story wooden building 70x80 feet, located at No. 66 Norfolk street, for the manufacture of extra No. 1, chemical, olive, soda olive, variegated, laundry and oil soaps. Has 4 employees, consumes about 2,000 pounds of tallow and grease, producing about 4,000 pounds of soap per week.

C. W. GRIFFITHS & Co., manufacturers of ribbons and trimmings. Commenced business in 1865. Their works are situated at the corner of Howard and Hamden streets, occupying a two story wooden building 100 x 33, and giving employment to 120 hands. Their machinery consisting of 12 Jacquard ribbon looms, winding and twisting machines, &c., &c., is driven by an engine of eight horse power, built by Chase & Leavitt, supplied with steam from an upright flue boiler, 10 horse power.

Messrs G. W. Griffith & Co., also occupy three floors in two six story granite buildings, 95 x 25 feet, situated at Nos. 161 to 167 Pearl street, for the manufacture of worsted knit goods and jaconet rufflings, employing 200 hands. The machinery is driven by an engine of eight horse power built in this city by Chase & Leavitt. This firm have capacity for doing a business of $500,000 per year. Their office is at No. 16 Milk street.

T. D. MURREY, occupies a three story brick building 70 x 40 feet, located at No. 1942 Washington street, for the manufacture of marble monuments, mantles, &c. He commenced business in 1848; has twelve employees and does a business of $12,000 per annum.

J. W. TUFTS & Co., occupy three brick buildings, one, two stories 40 x 60 feet; one, one story 40 x 60 feet, and one, one story 60 by 75 feet, located on King and Elmwood streets, for the manufacture of fancy and family soaps. They commenced business in 1866; employ eighteen hands and turn out 100 gross of soaps per day, doing business amounting to $50,000 per annum. They have in use a boiler of 20 horse power, built by the Lowell Machine Company, of Lowell, Mass.

WILLIAM H. DOW occupies a brick building 40x40 feet, and storehouse 40x50 feet, located on Marginal street, (Boston Highlands,) for the manufacture of hard and soft soap. He commenced business in 1860; has 10 employees, and produces 200 barrels of soft soap per month, and 500 barrels of hard soap per year. Also, renders 2,000 lbs, of tallow daily. The amount of business done being $120,000 per annum. His machinery is driven by an engine of 15 horse power, supplied with steam from a tubular boiler, both of which were built by Campbell, Whittier & Co., of this city.

CHARLES R. MCLEAN, millwright, occupies a two story wooden building, 30x40 feet, located at No. 8 Lewis street; residence, No. 138 Lexington street. He is a builder of flouring mills, rice mills, grain elevators, dye wood mills, and mill work in general, and will do work in any part of North or South America. He commenced business in 1864 and employs 20 hands.

ATLANTIC WORKS. This company was incorporated in 1853, and are manufacturing iron steamships, marine engines and boilers, general machinery, &c., &c. Franklin W. Smith is President of the company.

HUGH CONNOR occupies a 2 story wooden building, 25x50 feet, with basement. Also, an L attached, 40x60 feet, located at Nos. 131 and 135 Summer street, for the manufacture of brass castings of all descriptions. He commenced business in 1864, and employs 10 hands. His machinery is driven by a steam engine of six horse power.

THE BOSTON DYE WOOD AND CHEMICAL CO. occupy a 3 story brick building, with out buildings, wharf and dock room, covering in all 90,000 square feet, located on Border street, for the manufacture of, and importers and dealers in, drugs, dye woods, liquors, and extracts. The business was established in 1868, and gives employment to 40 hands. Their machinery is driven by a steam engine of 200 horse power, Babcock & Wilcox patent, built by the Atlantic Works, of this city. Also, a 40 horse power engine, built by the Putnam Machine Co., of Fitchburg, Mass. Steam is supplied by 4 tubular boilers, 100 horse power each, built by McKay & Aldus. The company use, in their works a large copper vacuum pan, for making extracts and liquors, costing, with its fixtures, $10,000. They have a capacity for making 2,000,000 lbs. of liquors and extracts, and grind 8,400 tons of wood per year; doing business amounting to $1,000,000 per annum. Edward F. Porter is President; Joseph C. Stevens, Treasurer, and Charles E. Thayer and G. P. Loring, Directors of this company. Store 116 Milk street, corner Batterymarch street.

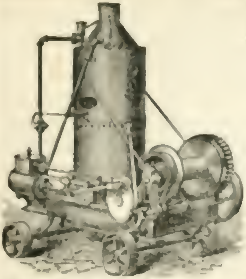
A. P. CLARK & Co. occupy a three story wooden building 135 x 45 feet, and storehouse capable of holding 200,000 bushels of salt, which article they manufacture, employing 10 hands. They commenced business in 1852. Have two run of stones and grind about 50,000 bushels of salt annually, which is packed in bags and boxes weighing from 5 to 250 lbs. each. Their works are located at the foot of Sumner street, on Clark's wharf. An engine of 35 horse power, built by Bird & Co., of this city, drives their machinery.

HOWES & PIERCE occupy a one story wooden building 25 x 60 feet, located at No. 115 Sumner street, for the manufacture of boats of every description. They commenced business in May, 1867.

MANSON & PETERSON occupy 2 three story brick buildings. One 45x90 feet, the other 36 x 45 feet, located on the corner of Border and Decatur street, for the manufacture of centre, dining and extension tables and mouldings. They commenced business in 1844, employ from 50 to 75 hands, and consume on an average 80,000 feet of lumber per month. An engine of 75 horse power drives their machinery.

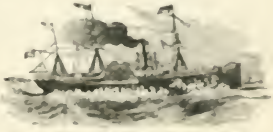
THE CENTRAL IRON FOUNDRY, Dyer & Garney, Proprietors, occupy 2 foundry buildings. One 50x100 feet, and the other 40x75 feet, with out buildings consisting of 3 pattern lofts, a pattern shop, carpenter shop and blacksmith shop, located on Border street, opposite Central square, for the manufacture of machinery and ships castings. They commenced business in 1856, employ 75 hands, and consume 150 tons of iron per month. Their machinery is driven by an

LOUIS OSBORN,



MANUFACTURER OF

STATIONARY AND PORTABLE



STEAM ENGINES;

Chopping Machines, Oil Presses, and Boiler Work.

PARTICULAR ATTENTION PAID TO REPAIRING

Steamboat Machinery and Boilers.

MARGINAL STREET, opposite Cunard Wharf,

EAST BOSTON.

engine of 10 horse power, built by Bird & Co., supplied with steam from a tubular boiler, built by the Maynard Iron Works, of this place. This company do business amounting to $[illegible] per annum.

Louis Osborn, manufacturer of steam engines and general machinery, occupies a 2 story wooden building, [illegible] feet, used as a machine shop; a one story wooden building, [illegible] feet, as a boiler shop; a blacksmith shop, [illegible] feet, one story; and a storehouse, [illegible] feet, one story; situated on Marginal street. The business was commenced in 1851, and gives employment to [illegible] persons. The machinery, consisting of 7 engine lathes, [illegible] planers, 1 screw cutting machine, two upright drills, and other machinery adapted to the business, is driven by an engine of [illegible] horse power, and boiler of eight horse power, built by the proprietor.

The Maynard Iron Works occupy a one story wooden building, located at the corner of [illegible] and Maverick street, for the manufacture of marine and stationary boilers, ship and oil tanks, steam engines, shafting, and pulleys. They commenced business in [illegible], and when in full operation, they employ 200 hands. Their machinery is driven by a [illegible] horse power engine, built in New York, supplied with steam from a tubular boiler of their own manufacture.

Lewis & Ward occupy a room [illegible] feet, in a two story wooden building, located on Border street, near Central square, for the manufacture of [illegible] machines. They commenced business in July, [illegible], and have [illegible] employees.

[illegible] Brothers occupy one floor [illegible] feet in a two story wooden building located at No. [illegible] Maverick square; also a room [illegible] feet in a wooden building located at No. 2 Border street, for the manufacture of [illegible]. They commenced business in January, [illegible], and employ [illegible] hands.

M. [illegible] & Co. occupy [illegible] brick buildings, covering about [illegible] square feet of room, located on [illegible] street, for the manufacture of [illegible] oil. They commenced business in [illegible], employ [illegible] hands and have a capacity for turning out [illegible] gallons per day. An engine of [illegible] horse power drives their machinery.

E. [illegible] & Co. occupy a wooden building [illegible] feet, located on Liverpool street, near Central square, for the manufacture of marine and stationary boilers, oil and ship tanks, iron bridges, sugar pans, [illegible], &c. They commenced business [illegible], employ [illegible] hands, and [illegible] per annum, and do a business amounting to $[illegible] per annum.

Thomas [illegible] occupies a two story wooden building [illegible] feet, located at Nos. [illegible] Sumner street, for the manufacture of boats of every description. He commenced business about 17 years since, and has [illegible] employees.

William H. [illegible] occupies a one story wooden building, [illegible] feet, located on [illegible] street, for the manufacture of marine and stationary boilers, oil and ship tanks, [illegible], sugar pans, [illegible], &c. He commenced business in [illegible], and has [illegible] employees.

Adams' Sugar Refinery. [illegible]

[illegible]

The sugar cane belongs to the grass tribe of plants, and is of a very simple structure. There are many varieties of

sugar cane cultivated in the West Indies, Brazil, Louisiana and the Mauritius, the principal of which are—first the common or Creole cane, from having been the one originally introduced into the New World; second, the yellow Bourbon; third, the yellow Otaheite. The other varieties are—fourth, the Otaheite with purple bands; the purple Otaheite and the transparent or ribbon cane, known by its dark red streaks on a clear wax looking ground. The sugar cane is a perennial plant arriving at that stage of its existence when its growth is for a short time suspended, and when it seems to evince a desire to perform another function, that of fructification, at from eleven to fourteen months after planting. The structure and organization of the cane is very simple. The internal structure consists of a series of cells, hexagonal in shape, which touch each other in every direction. They are formed by a thin, delicate tissue which incloses them so that each is perfectly closed and independent of those adjoining. This structure is called the cellular structure. Interspersed through this are a number of vessels running in groups, each of which is inclosed in a sheath of woody fibre. Surrounding the whole stem is the ark, covered by its coating of silica.

The history of the plant is involved in obscurity. The earliest records we have of the sugar-cane are found in the writings of authors who lived three centuries before the Christian era. From them we learn that the plant appears to have been imperfectly known, even to the Greeks and Romans; it is also stated that the cultivated sugar-cane very rarely produces seeds.

Cane juice is the fluid obtained from the cane by a degree of pressure sufficient to lacerate and break to pieces its entire structure. When a portion of sugar-cane, cut into thin slices and dried is infused in cold alcohol, a peculiar substance remains in solution, which is obtained by evaporation. It is neither salt nor sweet to the taste, is uncrystallizable, and highly deliquescent. The juice of the cane, on the authority of Dr. Evans, when recently expressed, is opaque, frothy, and of a yellowish-green or sometimes greyish color. It has an aromatic and sweet taste, and balsamic odor, and produces a slightly acid reaction on litmus paper. In the latter respect, it offers considerable variation. Its specific gravity is said to vary from 1.046 to 1.110, from 7° to 15° Beaumé. Cane-juice consists of two parts, easily separated from each other by filtration, the one being a perfectly transparent fluid, of a pale yellow color, the other a dark-green fecula which remains upon the filter.

Crystallizable sugar, so denominated by chemists, is the ordinary sugar of commerce. When pure, it is solid, transparent and colorless. It crystallizes from its watery solution in oblique rhomboidal prisms, but the form of the crystals is modified by the addition of the solution of certain foreign substances. It is soluble in one-half of its weight of water at the temperature of 60°, and in one-fifth of its weight at the boiling point; and like all other organic oil substances, undergoes decomposition from slight disturbing causes.—When pure, however, as in the case of refined sugar, it is not susceptible of any chemical change. The variety of cane most cultivated is the "Otaheite," which originated in the Society islands, and the introduction of which is accredited to the voyagers Bugainville, Cook and Blight. The former brought it to Mauritius, whence it spread to Martinique, and soon after into the rest of the West India Islands and the other parts of the continent of America. It was introduced into Louisiana in 1797, but experience has shown that it is not suitable for general cultivation in that State, as it suffers from the autumnal frosts.

The construction of the sugar mill is too well known to require description. The period of the year having arrived when the canes are to be cut and their saccharine fluid expressed that it may be converted into sugar, it is obvious that it is the interest of the planter to obtain the largest possible amount of sugar from the canes. The fluid contents of a cane form ninety per cent, in weight, of the entire structure of the stem, consisting of water holding in solution a large quantity of crystallizable sugar, and a small amount of highly injurious foreign substances. The remaining ten parts constitute the woody tissue of the plant. The machine for extracting the saccharine constituents of the cane consists essentially of three rollers, which are placed in a horizontal or a vercial direction. The cane juice obtained by the pressure and squeezing is a very heterogeneous fluid, comprising soluble and insoluble matter. The latter consists of the cellulose and woody fibre, earthy particles which have adhered to the cane, green coloring matter, and other debris, which are separated from the fluid by filtration. The average amount of juice furnished by 100 lbs. of cane, as detected by eminent chemists is about 56 per cent. Mills have been recently manufactured with five rollers and are successfully used in Mauritious and other countries, producing 70 per cent. of juice. The motive powers attached to sugar mills in the colonies consist of cattle, wind, water and steam. Those in Louisiana are principlly operated by steam. After the canes are pressed, the juice is immediately submitted to the next process, which is defecation or clarification.

Different modes for effecting defacation, purification, are in vogue, but that usually employed is lime. The cane juice as it comes from the mill is put into a sort of cistern capable of holding many gallons, and here it is suffered to remain until the "clarifiers" are ready to receive it. The clarifiers are usually shallow copper pans of a circular form, almost flat, and capable of holding from 250 to 400 gallons each. The temperature of juice is raised, which is usually about 140°, to which a portion of the milk of lime is added until the reaction is faintly alkaline to litmus paper, and the juice is then boiled so that the two bodies may be intimately blended together. The heat is then shut off, when clarification immediately takes place. The cane juice thus defecated is passed off into a grand vessel, the thick scum resting on the top, while heavier matters sink to the bottom. Cane juice defecated in this manner is generally transparent, of a yellow color. The lime employed protects the cane sugar, but decomposes a portion of the uncrystallizable sugar. Steam defecating vessels consist of an iron chest lined with copper in which is coiled sufficient iron pipe to supply the due amount of steam to effect a rapid ebullition of the cane juice. The cane juice is next reduced to a kind of syrup which is done by renewed defecation, evaporation and concentration of the syrup into sugar. This is carried on simultaneously and is ultimately grained or cured to a density fitted for shipping purposes. It is known in commerce as muscovado sugar, and is the identical article that finds its way to the sugar refineries of Europe and America. The sugar, mixed up with variable proportions of foreign matters is in that stage of defecation which corresponds with the first steps taken by the refiner.

It is our purpose to now invite the reader to follow us from the boiling house, and notice, in detail, the manipulations to which sugar is submitted by the refiner. The process is as interesting as it is ingenious, and we will visit the Adams Sugar Refinery, located on Granite street, South Boston. Passing over Federal street bridge, the citizen or stranger cannot fail to notice the pile of brick and motar that looms up to the right of him, in gigantic proportions, and overlooking the harbor. Here is to be found one of the most extensive and complete sugar refining establishments in the United States, if not in the world.

Before entering it we will give a description of the building. During the summer of 1858 the first sea wall was built, preparatory to erecting the building. Not less than 12,000 piles were driven into mother earth for the partial

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foundation. It required 5,000 squares of gravel for pileing. The area thus covered was 90,000 square feet. The foundation, which is of brick, was laid in the autumn of the same year. The walls are three feet thick at the base, and containing the enormous quantity of 5,500,000 brick, in the layers of which was used forty cargoes of sand, 4,600 casks of lime, and 1,500 casks of cement. The main wall, fronting on Granite street, is 118 feet depth, 80 feet in length. The building is nine stories high having a flat roof. The floors, which are either all iron, stone or brick, are supported by 162 immense iron columns.

In addition to the main building, there are others: a storehouse for the repository of raw sugars, 200 by 50, which connects with the main buildings; the charcoal-house, 130 by 48; the boiler-house—an entirely separate building, 64 by 54, besides other buildings adapted to the necessary and incidental works of the establishment. The appointments in every particular are of the most complete, substantial and improved character. It is not unjust to say that Belcher's refinery, at St. Louis, is no comparison to it; and it ranks with Stuart's celebrated establishment in New York.

Now let the reader change places for the nonce with our reporter, and ere he reaches the last line of this article he will have learned the modus operandi of converting the saccharine matter of the cane into the snow-white sugar that enters into family and confectionery use. Passing through the office—"No Admittance except on business"—we enter the receiving room. This department of the establishment is devoted to the reception of sugars, which come from the plantations in hogsheads, boxes, bags and baskets. Here we find the West Indies, Brazil and other sugar-producing countries represented by their saccharine matter. The sugar is rolled and trucked in here from vessels and adjoining wharves. The receiving room extends the entire width of the building proper, and has a capacity for 2,500 hhds. of the unrefined sweet. A coopers shop is also associated with this department. Thousands of barrels are on hand to receive the sugar when ready for market, and a number of workmen are daily engaged. Ascending a single flight of stairs, we enter the melting room, where some 25 men are employed in the various duties of preparing the "stuff" for the pans. The sugar, as fast as wanted, is brought up from the rooms immediately below, by means of steam elevators. It is then seized by the "dumpers," who open the hogsheads, boxes or bags, and emptying the sugar on the floor directly above the pan below, proceed to shovel it through an orifice, or reception hole, to the pan. Different qualities of sugar are thrown promiscuously together, and melted, when a desirable grade of sugar is sought to be manufactured. They necessarily contain more or less proportions of foreign matters, but which are immediately precipitated when the sugar is dissolved in water. Their combined amount varies from 2 to 6 per cent. Java sugar is the most desirable for refining purposes, no matter how black it may be. The sugar we saw thus commingled were procured in Java, Cuba, Bahia and one or two other countries. Every grain of fermented sugar refuses to crystalize. The amount of sugar shoveled into the pan, at each melting, is between four and five tons. The skill and rapidity with which the saccharine matter is taken from the hogsheads is astonishing to the uninitiated. Ordinarily, two hog-sheads are opened and emptied per minute. When the pan is filled the cover is put on air tight.

Immediately above the melting-pan and a few feet from the receiving-hole, are fresh water tanks, the outlets of which communicate with the melting pan, and are controlled by the person having charge of the melting. It is obvious that the raw material would incline to carmelization or adhere to the surface of the pan under the temperature of the heat, and thus it is necessary to allow water to pass in such quantities as judgment would dictate. It is immaterial whether the water be cold or hot. These tanks hold about four hundred gallons each, and are constantly kept full by a force-pump operated in the engine-room. In another part of the building may be found a steam box.

After the hogsheads and boxes have been emptied of their contents, they are immediately put into the steam-box, where they are suffered to remain until thoroughly vaporized. This process requires only a few minutes. In the meantime the saccharine matter on the wood runs or drips into a box below through the grated floor of the steam-box. So not a particle of sweet is lost. The steam permeates the pores of the wooden vessels, extracting every particle. The doors of the box are then opened, and the hogsheads and boxes are rolled out, having the appearance of being fresh from the cooper's shop. Contiguous to the steam-box is an iron tank, in which the Manilla bags, more or less saturated with sweet, are boiled. The sugar extracted from them passes off in the form of sweetened water to a receptacle below. The hogsheads, being as good as new, are used for their original purpose, and the bags, when dried, are disposed of for various purposes. Following the muscovado, when it passed through the hole in the floor, let us see what becomes of it.

Passing down stairs, we find ourselves in front of the melting, or vacuum pan. The object of the vacuum pan is to prevent the evils arising from a high temperature, during the process of concentration. Liquids boil at a temperature inversely proportionate to the pressure exerted on their surfaces. The addition of the water, above noticed, to the sugar, gives a syrup, which is heat by a long coil of steam piping introduced into the interior of the pan, aided by evaporating power caused by the diminished pressure on the surface of the liquid. By the aid of the vacuum pan the syrup is con-

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centrated rapidly, and at a comparatively low temperature. The pan requires a heat of temperature equal to 135 deg. vacuum or 270 deg. in the atmosphere. It requires from fifteen to twenty minutes to melt sugar. The density of the liquid is arrived at by what is commonly called Beaume's saccharometer. The proper specific gravity having been obtained, the operator shuts off the steam, and opening the cock the syrup passes from the pan into the receiving tanks, capable of holding twenty hogsheads or more of syrup each. The pan being ready for a repetition of the same process a quantity of water is let in from the tanks above, the cured sugar being thrown in at the same time. Passing along the subterranean passage we catch a glimpse of the tank containing the hot liquid. It does not have the appearance of saccharine matter, but resembles a huge mud puddle with a thick debris floating on its surface, containing variable proportions of foreign matters. The color or phenomena assumed is in consequence of the chemical change it has undergone, having become carbonized.

Emerging from darkness into daylight, it is now nesessary to ascend to the ninth story of the building to witness the next step taken in the refining process. This is known as the "blowup" or clarifiing room. The saccharine liquid which we left under ground, is forced to the upper part of the building through numerous pipes, and is distributed at will to the "blowups" or clarifying pans, in which the first process of defecating or expulsion of feculent matter takes place. There are ten of these clarifiers, holding about four thousand pounds each of sugar. Each pan has a hollow bottom and several coils of perforated steam pipe. During the process of clarifying, the surface of the liquid is characterized by that same black scum that was noticed in the receiving tank when it came from the vacuum pan. The denser substances are precipitated to the bottom of the pans, while the clear liquid lies immediately below the scum. The scum is removed and sent on its way to pans prepared for it two floors below. After defecation takes place the density and color of the syrup is detected by inserting a vial into it. When corrected, the syrup is let off and travels on its journey to the next manipulation in the bag filter room. The white liquor "blowup" is also situated in this room. Its capacity is four thousand pounds. It is unnecessary to remark the process by which the white liquor is produced. It is colorless, incapable of dissolving any portion of the sugar with which it comes in contact in the dressing of the goods, and is of sufficient density to force molasses before it. Its concentration has a density of 31 deg. 5 min. Beaumee, when cold. Retracing our steps we first find ourselves in the bag filter room.

The next process of clarification is by filtration. The syrup passes from the clarifying pans above into the bag filters, in order to separate the mechanical impurities from the defecated liquid. These bags are made of cotton, about twelve inches wide and five feet in length, each of which is introduced into another bag of the same length but not so wide, and made of firm texture. Into the neck of each bag thus arranged is inserted a short metal tube, to which the sack is tied and by which it is fixed to the bottom of the cistern adapted to receive the syrup as it comes from the clarifiers. A large amount of filtering surface is thus obtained in a small space. The filtration is rapid. About one hundred of these bags are used at a time, each holding five gallons. At the bottom of the iron case, in which these filterers are hung, is attached a cock which allows the liquor to escape into the coppers, when practicable, or into receivers constructed for the purpose. Sets of bags are employed so that while some are being cleaned the full complement may be at hand to use. An examination of the liquid by

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filtration showed it to be a perfectly transparent fluid of a pale yellow. . The fecula remaining on the filters is a darkish green, composed of globular matter. The liquid itself, at this stage of clarification, chemically considered, consists of water, sugar, a small quantity of dextrine, and a coloring principle. Nitrogenized matters injurious to crystallization still remain.

The next department is the scum liquor room, where the scum of the clarifiers is treated. This, having been previously taken from the tops of the "blowups," is transferred to this room, when it is submitted to a great pressure between the upper and nether plates of a mechanical contrivance which exudes the saccharine matter in considerable abundance. The refuse is then cast aside. The liquid obtained passes into the common reservoirs.

Descending another flight of stairs we find ourselves in the char room, from which the (animal) charcoal filters are filled. The "char" is brought up by means of steam elevators, and is introduced into the filters immediately below by connecting pipes. The "char" is shoveled into holes, forming the entrance to the pipes, and which are on a level with the floor, very much like a coal hole in a sidewalk. The chemical characteristics of the charcoal not only have the power to remove the organic coloring matter from the syrup, nitrogized matters and assist granulation, but it enables the refiner to obtain a larger amount of sugar and an improvement in the quality. The workmen in this room look more like Ethiopians than white men. Having obtained a sufficient snuff of the atmosphere, go down with us to the liquor room where the syrup from above finds its way into huge filters and is fercolated for crystallization. There are thirty-six of these filters, made of wrought iron, being each twenty feet high, four feet in diameter, holding sixty-eight barrels of "char" and a ton of sugar apiece. As already hinted, these vessels receive the "char" from above through connecting pipes at the top of them. These metallic filters are both cylindrical and square in shape, each having a double bottom, and after receiving the "char" are hermetically sealed. Closely packed with the requisite amount of bleaching and defecating material—reduced to the state of a coarse powder, or in grains, and slightly moistened,—the hot syrup is admitted into the upper part of the filter and being forced onward by mechanical pressure it passes rapidly through the "char" and is received by the space between the two bottoms. There it enters another pipe which conveys it to the upper part of the second filter close by, and in a similar manner is forced into and through the third filter of the set, there being three filters to each set. The process of fercolation is complete. The liquor is now not subject to any further purification, but, as will presently be seen, is rapidly boiled down to the point of crystallization. It is pure, transparent, and is known as "boiling liquor." The "char" which has been used to the extent of rendering it useless for further filtering is again made as good as new by a process known in refining parlance as revivification.

Passing down into the next or second story, the process of revivification is going on. The "char" is taken out of the bottom of the filters and conveyed in wheelbarrows to the kiln and reburnt. It is first washed, in order that the syrup remaining in the interstices may be removed. The sweet liquid which comes away flows into an evaporating vessel. The "char" is then thrown on to the kiln or retorts and burnt. The retorts are made of cast iron, oval in shape, four by nine inches, and nine feet in length, and are securely arranged over openings in a cast iron bed plate. The furnace for heating these retorts is immediately below, and the flame therefrom communicates its heat to the contents above, charring and driving out the gaseous and other foreign matters retained from the liquor. It is ready for use again. The kiln room is 130x48 feet. The "char" having been revivified goes down to the receiving house and is used when wanted. Six large wooden tanks are used for fermenting the "char." Our curiosity now leads us to the pan room, where the syrup is boiled down, it having arrived at that point of concentration when crystallization is desirable. The liquor for the (vacuum) pans is received from the tanks, located in the northerly part of the building, through pipes connecting with the pans. There are three of these pans here, each holding a quantity equivalent to 245 barrels of dry sugar. The temperature of this room varies from 118 deg. to 135 deg. Fahrenheit. The pans are made of cast iron, 1½ inches thick, lined with copper, and have four hundred and fifty feet of four inch copper pipe coiled within them, which radiates the heat for boiling. Attached to the pan is a thermometer to indicate the temperature to which the syrup contained within is exposed, and also a barometer to measure the amount of exhaustion produced in the vessel. The temperature of the syrup in the pan is usually from 145 deg. to 160 deg., but depending on the stage of the sugar. When boiling the barometer stands at 26 inches. The time when the boiling shall cease is determined by the temperature, or by certain tests which are practiced among sugar boilers, and is called "proof." A peep into one of the pans, through a "sight," showed the boiling sugar to be clear and transparent, the ebulition quick and sharp, and the bubbles bursting as they rose, indicating that the inspissation or thickening was rapidly advancing.

The "string-test," which consists in taking a portion of the liquid between the forefinger and thumb and permitting it to remain until the thread attains the length of an inch or inch and a half before breaking, and by the "proof stick," producing the bubble test, indicate that the sugar has become

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sufficiently thick and shows graining. A moderate thread corresponds to 78 per cent. sugar, and boiling point 220 deg. Fahrenheit. The steam is then shut off and the contents of the pan dropped into an open pan, or "cooler," below, where it is suffered to remain till wanted. About 120,000 lbs. of sugar are boiled daily.

Passing into the fill house, we find a large open pan, which is connected with the pans above by pipes, and into which the boiling sugar ultimately finds its way, preparatory to crystallization. The sugar is first heated to a temperature of 170° Fahrenheit and then drawn off from the heaters into iron conical moulds having apertures at the bottom, which are at first closed with an iron pin. The moulds, holding 125 lbs. each of green sugar, are supported on moveable iron carriages, there being six moulds to a carriage. The green sugar is drawn off into them and then rolled away. There is usually about 40,000 of these conical or "sugar loaf" moulds in this part of the works. The secret of perfect crystallization is a freedom of motion of the particles of matter; and in order to effect a perfect and regular crystallization it is necessary that the green sugar should cool slowly in the moulds. This is produced by keeping it in a warm atmosphere.

We now leave the filling room and follow the green sugar to the curing rooms, which are in the ninth, eighth, seventh and sixth stories of the western part of the building. The moulds containing the hot sugar are brought up to the curing rooms on steam elevators, from the fill house where they have remained twenty-four hours. Here the moulds are taken from the iron carriages and fixed in holes cut in wooden tables made for the purpose, under which are metallic gutters for carrying away the molasses which is allowed to escape by taking out the plugs. The more complete the draining, the more perfect the crystallization. The temperature of the curing rooms is about 90°. If cooling took place rapidly, the drainage would be incomplete and the crystallization of the sugar would be replaced by the formation of compact rocky masses. No currents of air are permitted, and plenty of light is desirable. The molasses which has percolated through the sugar and find its way into the gutters, run into a cistern made for the purpose and is manipulated for syrup. The tanks containing the dressing or white liquoring, of which there are ten in number, are located in the upper part of the premises. Pipes connect with these through which the liquor or dressing syrup flows to the several rooms containing the sugar in moulds. "Claying" was formerly employed to dress the goods, but "liquoring" is an improvement. Its object is to replace the dark color of the sugar by another of greater purity and lighter color. In order to obtain a given quality of sugar a certain quantity of "liquor" is used. The "liquoring" is pursued as follows: When the sugar is perfectly cold, about two quarts of the saturating solution is poured on, through a hose, a smooth and even surface being previously necessary in order that the liquor shall penetrate equally. The effect of this is to drive the green liquor in the sugar before it and constitute the upper or larger portion of the loaf perfectly white. On the second liquoring, the hard crust formed on the top is removed with an instrument made for the purpose, and the sugar saturated with the solution as before. The oftener the sugar is saturated the whiter and nicer will it prove.

When the sugar is sufficiently dry it is taken out of the moulds, the dark-colored "tips" are cut off, and the crystallized white is then put into the baking ovens, of which there are four—one to each curing room. The sugar is exposed to a heat of 120° Fahrenheit, and is baked to a hardness. The baking is carried on gradually. For crushed and powdered sugars, it requires six or seven days. The "tips" are used for making the liquoring, or if very clammy, are consigned to the concentrating vessels. Having thus followed the commercial article through its various stages till crystallized, we will now pass through the rooms where it is prepared for market. The granulating room first occupies our attention. Sugar that has been baked about a week is brought here and exposed to the rapid revolutions of a heated horizontal bed to which is affixed a series of sharp knives. The sugar thus shaved off passes through a hopper into a tight heated room below, where it drops on to a "granulator," consisting of six stationary "shelves," one above the other, with a rod passing through the centre of them. Over each of these shelves passes a frame supporting a series of knives or teeth which are made to scrape the bed of the shelves, graining or granulating the sugar to the required fineness. The temperature of this room is generally about 160°. The granulated sugar passes off into sieves, which will be noticed when we get round to them. In another room may be found a mill for breaking up the loaves, preparatory to making the "crushed sugar."

After it has been reduced to lumps of a certain size, it is passed through a crushing mill which turns out the sugar in small lumps,—so often seen on the tea table. As fast as crushed it passes through a hopper and into barrels, ready for market.

To make powdered sugar, the process is followed as pursued in granulating. The fine particles are separated from the granulated article by a sieve adapted for the purpose. The article familiarly known as granulated sugar is dried while passing over hot iron plates. It is then run to the sifter. The finest particles are separated from it and are deposited in the powdering hoppers, and thence into barrels. All the nice white sugars pass from the several departments into a single room, and thence into a graduated sifter, whose revolutions separate and discharge the coarse, fine and pul-

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verized portions of the sugar. These are carried off into the respective hoppers and dropped into barrels. The sugar is then headed up, rolled to the storerooms, weighed and marked, and is now ready for shipment. In order to make, perhaps, plainer the process pursued in arriving at the different grades of sugar, we will briefly recapitulate. The sugar, after boiling the first time, sets a day, drains, the green syrup runs off and is then "liquored." It is ready for granulating or crushing. The green syrup from the first sugar is then clarified, filtered and boiled in the vacuum pan, and drawn off into moulds. After draining it is "liquored" with a brown liquor. This makes "extra C, B and A coffee." The green syrup from the second boiling is clarified, filtered and boiled, and run into tanks twelve feet long, three feet deep and six feet wide. It is suffered to remain here two weeks. It is then taken out and manufactured into "C sugar," in the following manner: The dark looking syrup is put into large moveable boxes or tanks, and passes through revolving knives into the mixer, and thence into the centrifugal machines, which drive out the syrup and leave nothing but the dry light sugar on the cylinder. The motion is so rapid that the syrup flies off from the axis in a tangent to the periphery or circumference of the machine. The sugar is taken out of the cylinders and headed up in barrels, ready for market. It requires only two or three minutes to extract sugar from the syrup. This sugar refused to crystalize during the percorations of the liquor. The thick, heavy liquid thrown off by the centrifugal machines is called the "mother," which is left after the crystalization of the cane-syrup. It is not thrown away, but made into syrup.

The store rooms are located in a wing attached to the main building, and like it are impervious to fire.

Last, but not least, is the engine room, within which lies the source of all the power there is displayed in the entire works. The hand serves but to guide and give direction to the works, but the engines are the heart of all the system we have been describing. There are two engines here of 50 horse power each, one of which is high pressure, and its work is to force water over the building and drive the machinery that works the vacuum pumps. The air-pumps are three feet in diameter, length of stroke two feet. The other engine furnishes the power of running all the machinery of the establishment. Further on are six pumps used to force the liquors to the upper part of the building. The seven furnaces, with a low-pressure steamboat boiler each, and having 16-inch flues, consume fifteen tons of anthracite coal per day. There is also a blacksmith shop connected with the establishment, which is always busy.

The liquor room contains twenty-eight tanks which are used for the boiled syrups, having a capacity of 70,000 gallons, or 700,000 pounds of raw sugar.

The number of men usually employed in and about this refinery is nearly 300. The pay roll often reaches $15,000 per month. The house is capable of turning out from 600 to 700 barrels of sugar a day and 100 barrels of syrup. It is one of the most complete refineries of sugar in the country. Not less than three hundred thousand dollars' worth of sugar is daily *in transitu* here, and the amount of machinery and other appliances and contrivances necessary in the art is wonderful. As a single item, we would mention that there is about three hundred miles of steam and liquor pipe in the establishment. Such a busy place as we have attempted to describe, is well worth a visit, even if one is compelled to leave his coat behind and journey in a sweet temperature of 100° Fahrenheit.

HAWES & HERSEY, manufacturers of stationary, portable and hoisting engines, moulding machines, mortising machines, machinery for carriage builders, rotary pumps, glass presses, sugar mills and general machinery, commenced business in 1859. Their works are situated at the corner of Second and E streets. They employ 50 hands, consume about 20 tons of iron per month and do a business of $100,000 per annum. The engine used for driving their machinery is one of J. Southers', 20 horse vertical, same style as those made by themselves. A 40 horse boiler, of their own manufacture, furnishes the steam for the engine. Their building is heated by steam, pipes being laid in each room, and so arranged as to be used for extinguishing fires.

C. BLAKE occupies a three story wooden building, 130x40 feet, as a manufactory; also, a two story brick building used as a dry house and engine room, 30x25 feet, located on Federal street, for the manufacture of what-nots, hat-trees, etageres, &c. Their building is heated by steam and gas only, no fires being used about the premises. He commenced business in 1856, has 100 employees, consumes about 300,000 feet of black walnut per year, and does business to the amount of $120,000 per annum. His machinery, consisting of 2 moulding, 2 planing, 1 boring, 1 jointing and 1 sand-papering machine, 1 belt saw, 4 circular saws and 5 jig saws, turning lathes, &c., is driven by a double engine of 40 horse power, built by Badger Brothers, of Quincy, Mass., supplied with steam from a tubular boiler, 40 horse power. Office and salesroom, No. 100 North street. (See page 195.)

CITY POINT WORKS, Harrison Loring, proprietor. Commenced business in 1847. He occupies a water front of 600 feet, upon which are built two spacious warehouses. The machine shop is four stories high, 300 feet in length, and 45 feet wide, built of unhewn granite. This building was formerly used by the city as a House of Industry, and is the first iron ship building establishment permanently located in New England. This estate consists of seven acres of upland and a million feet of flats. In 1857-8, Mr. Loring built several vessels to go to India. He also built two iron steamships of 1,150 tons each, "The South Carolina" and "Massachusetts." He has since built for the Union Steamship Company, of Boston, two iron screw steamships the "Mississippi" and "Merrimac." The "Nahant," the first monitor ever built in New England, was built at these works; also, the Canonicus.

S. A. WOODS occupies a three story building containing, 30,000 square feet of flooring, located on Dorr, near Federal street, built exclusively for the manufacture of Woodbury's improved planing, tonguing and grooving machines; Gray's and Wood's improved combination planer and moulding machines; and a variety of wood working machinery. Also, manufacturers of the self-oiling circular saw arbors, patented September 7, 1858. The improved planing, tonguing and

JOHN LALLY,

Builder of

Coal Bunkers, Gasometers,

Oil Stills and Tanks, &c.

HIGH AND LOW PRESSURE

Steam Boilers, Ship's Tanks,

Repairing of Steam Boilers promptly attended to.

GRANITE, CORNER FIRST STREET,

South Boston.

grooving machines, J. A. Woodbury, patentee, of which Mr. S. A. Woods is the sole manufacturer, have been granted several patents for improvements upon the celebrated "Woodworth's" which are as follows: April 13, 1852, (extended, 1866,) for gearing the feed rolls on both ends. Nov. 21, 1854, (extended 1868,) for hinged presser bar, located close to and directly in front of the cutters. Nov. 13, 1855, for double adjustment of the tonguing and grooving cutters upon both sides of the machine. March 30, 1858, for rotary lip and gouge cutters. June 8, 1858, for pressure surfaces applied close to and directly in front of the side cutters. June 8th, 1858, for placing the under cylinder at or near the end of the machine. September 7th, 1858, for self-oiling boxes. July 24th, 1868, for weighting the pressure on the feed rolls instead of using rubber springs. At every exhibition where this machine has been exhibited, a gold medal has been awarded for superiority over every other machine, and it is warranted to be the best ever invented for the dressing of lumber. The business was established in 1854, and gives employment to 60 hands. The machinery consisting of 30 engine lathes, 7 planers, and other machinery adapted to the business, is driven by an engine of 35 horse power, built by the Putnam Machine Co., of Fitchburg, Mass., with one tubular boiler of 45 horse power, built by Campbell & Whittier, of Boston, Mass. Do a business of $150,000 per annum. Salesroom 67 Sudbury street, Boston, and No. 85 Liberty street, New York.

Suffolk Glass Co. Nathaniel Brown, president; Joshua Jenkins, treasurer, and G. S. Laselle, agent, at 58 Barclay street, New York. Established by Joshua Jenkins in 1857, for the manufacture of flint glass ware, of every description. Their works are situated on Lowland street, and consist of a three story building, 142x44 ft. built of brick and wood, 42 ft. being brick, in which is contained the furnace for melting the glass. The wood part is used for a packing room, cutting shop, &c. They also have a two story wooden building used as a mill and for storage purposes, and a blacksmith's shop, one story, of wood, 25x20 feet. They consume 11 tons of raw materials per week, have 70 employees, and do a business of $125,000 per annum. A six horse upright engine furnishes the impetus for the machinery. Office 78 Water street, Boston.

John Lally occupies 15,000 square feet of land, on which is a wooden building 140x50 feet, and a storehouse 50x30 feet, situated at No. 66 First street, for the manufacture of steamboat, locomotive, horizontal, tubular and upright tubular, flue and cylinder boilers, ships' water tanks, iron roofs, doors and shutters for buildings, &c., &c. He commenced business in 1861, has from 40 to 70 employees, and produces annually from 200 to 250 boilers. His machinery is driven by an engine of 15 horse power, furnished with steam from a tubular boiler of his own manufacture.

Eureka Iron Foundry, J. D. Howard, proprietor, manufacturer of castings of all kinds, for heavy and light machinery. Commenced business in 1846. Have 14 employees, and turns out 12 tons castings weekly. His foundry is situated on Earl street, a wooden building 105x35 feet, with wing 25x25 feet. He has an engine of 13 horse power for driving the machinery with a tubular boiler of 15 horse power, both built at the Globe Works, of this place.

J. Kittredge & Co., manufacturers of naval stores, occupy buildings covering about 10,000 square feet of flooring, located on First street, for the distilling of crude turpentine, they being the only manufacturers of the kind in New England. They commenced business about 25 years since, and have 5 employees. They have in use three stills, capable of working from 40 to 50 barrels of crude turpentine per day. Their office is at No. 65 Commercial street.

HALL & QUINBY,

MANUFACTURERS OF

ROTARY VALVE

MUSICAL INSTRUMENTS,

OF EVERY DESCRIPTION.

No. 62 Sudbury Street,

Boston, Mass.

HALL & QUINBY occupy the third floor of a five story brick building, 95x60 feet, located at No. 62 Sudbury street, for the manufacture of rotary valve musical instruments, from all kinds of metals. They commenced business in 1860, have from 20 to 25 employees, and do a business of from $20,000 to $30,000 per annum. Mr. Hall, of this firm, is leader of Hall's Brass Band, of Boston, the first organized brass band in the United States.

J. G. STORY & Co. occupy about 20,000 feet of room, located on First street, where they employ 15 hands in the manufacture of roofing materials. They commenced business in 1862; consume from 10,000 to 12,000 barrels of tar, and 650 tons felting per year. They do a business of $80,000 per year. Their office is at No. 10 State street.

COCHECO MANUFACTURING CO., incorporated 1836; capital, $1,300,000; D. Park, Treasurer; Office, 52 City Exchange; Lawrence & Co., Agents, 17 Milk street. The works of this company are located at Dover, N. H., on Central and Washington streets, and occupy the following buildings respectively: mill No. 2, 155x43 feet, five stories; No. 3, 200x43 feet, with ell 80x24 feet, six stories; No. 4, 200x45 feet, seven stories; No. 5, 250x45 feet, six stories. Connected with these are their print works, which comprise buildings as follows, viz.: one 180x40 feet, three stories; one 70x38 feet, two stories; one 35x30 feet, two stories; one 90x40 feet, two stories; one 58x40 feet, three stories, and another 65x50 feet, four stories. This company manufacture print cloths 3¼ yards wide, of which they produce annually about 15,000,000 yards, giving employment to upwards of 200 hands. They consume 5,500 bales of cotton, 4,000 tons of coal and 70,000 pounds of madder yearly, running 50,000 spindles and 1,200 looms. Their machinery is driven by an engine of 250 horse power, built by the Corliss Steam Engine Co., of Providence, R. I., assisted by 7 water wheels, making a combined power of upwards of 1000 horse.

WM. J. STEWART & Co. occupy a wooden building, 65x52 feet, located at No. 92 Second street, for the manufacture of copper and sheet iron work of all descriptions. They commenced business in 1849, have 6 employees, and do business to the amount of $18,000 per annum. This company make a specialty of steam and marine work.

BOSTON BEER CO. Incorporated in 1828; capital, $150,000; occupy as a malt house, a 6 story brick building, 182x57 feet. Also, a brewery, 80 x 40 feet, and 4 stories high, located on Second, corner D streets, for the manufacture of ale, of which they turn out 4,000 bbls. per month. Their motive power is derived from an upright steam engine of 15 horse power, supplied with steam from 2 tubular boilers, 30 horse power each, built by John Lally of this city. D. H. Tully is Treasurer, and E. A. Kenney, Superintendent, of this company. The office of the brewery is at No. 19 Central wharf.

THE PHENIX GLASS WORKS, located at the corner of Second and B. streets, occupy buildings as follows: Glass house, mixing room and store room, 50x50 feet, 2 stories, and built of brick. Also, a two story brick building, 120x28 feet, as a packing room, store room, &c. The business was established by Mr. Thomas Cairns, in 1812, and is the first flint glass manufactory in the United States. The business has been carried on since 1866 by his son Wm. Cairns, who employs 50 hands, and manufactures every variety of flint glass ware and chemical apparatus of the finest qualities.

THE N. E. FELT ROOFING CO., capital $60,000, occupy 20,000 square feet of land, located on First street, for the manufacture of Warren's felt roofing materials. They commenced business in 1852, and employ 200 hands.

THE BOSTON MACHINE CO. occupy a lot of land 200x120 feet, located on First street, corner of Granite, on which are the following buildings: a machine shop 140x116 feet, built of wood, two stories high, and a storehouse 50x28 feet.—They manufacture locomotives, stationary engines, dredging machines, iron bridges, power capstans, water works, stop cocks, hydrants, check valves and machinery in general. The business was established in 1864 and now gives employment to from 125 to 150 employees. Their machinery, consisting of 1 planer, 60 feet long, planes 8 feet square; 25 lathes, which turn from 10 feet to 12 inches in diameter and from 3 feet to 30 feet in length; 10 planers; 10 drilling machines; gear cutting machines from 10 feet diameter to the smallest required, and other machinery adapted to the business, is driven by an engine of 60 horse power, Charles Carr, patentee, supplied with steam from an upright tubular boiler, 60 horse power, both of their own manufacture. They do business of from $250,000 to $300,000 per annum.

R. HOE & Co. occupy 35,000 square feet of land, on which is a three story wooden building 200x45 feet, located at 41 Foundry street, for the manufacture of printing presses, book binders' presses and machinery. They commenced business in 1857 and employ 130 hands. Their machinery is driven by a steam engine of 30 horse power, built by Isaac Adams, with a tubular boiler, 40 horse power.

BAY SIDE CHEMICAL WORKS, Hodges & Richardson, Proprietors, occupy three wooden buildings. One 200 x 75 feet, one 200x100 feet, and an areatic building, 82x20 feet, located on First street, for the manufacture of chemicals, acids, and alkali. They commenced business in 1866, and employ 21 hands. Their machinery is driven by an engine of 10

PEIRCE, BROWN & CO.,

MANUFACTURERS AND DEALERS IN

CHAIRS,

Walnut, Chestnut and Painted

CHAMBER FURNITURE,

Bureaus, Sinks, Wash-stands, Tables, Bedsteads, &c.,

Corner Richmond and North Streets. - - Entrance 76 Richmond Street.

FOSTER PEIRCE, NATHANIEL BROWN, **BOSTON.** F. W. FORBUSH, J. M. POOR.

horse power, built by Hawes & Hersey, of this city, supplied with steam from a flue boiler, of 20 horse power, built by John Lally, also of this city. They do business amounting to upwards of $100,000 per annum.

PEIRCE, BROWN & Co., 76 Richmond street, are one of the largest manufacturers of chairs and furniture in the United States. Their facilities for obtaining large quantities of chair stock and lumber for furniture enables them to compete successfully with all others in their line. They employ several hundred workmen in their business, besides a large corps of local and travelling salesmen, the business extending to California, West Indies and Australia. Their large warehouse at the above location (see illustration in advertisement), is the depository of their goods, which is filled and emptied many times a year.

WILLIAM P. HUNT occupies a three story brick building 60x80 feet located at 763 Federal street, for the manufacture of Reed's patent steering apparatus. He commenced business in 1852 and employs 20 hands. His machinery is driven by a steam engine of 15 horse power, built by Campbell, Whittier & Co., of this city. He has supplied 250 vessels with their steering apparatus during a single year.

THE GLOBE NAIL CO. occupy a two story brick building, 98x45 feet, located on Foundry street, for the manufacture of horse nails. They commenced business in 1867, and are running day and night; employing 75 hands, during the day time, and 20 during the night. They turn out one ton of nails per day, and consume 2,500 lbs. of iron. Their machinery is driven by a steam engine of 25 horse power, built by the Old Colony Railroad Co.

THE DOWNER KEROSENE OIL CO. was incorporated in 1860, with a cash capital of $200,000, with Mr. Samuel Downer as President, which position he still holds. Their extensive works are located in First, Second and A streets, S. Boston, covering about 4 acres of ground. They employ 125 men and have a capacity of manufacturing 10,000 gallons of finished oils daily, or an aggregate of 3,000,000 gallons annually. Every kind of hydro-carbon made from petroleum is produced by this company from the white solid wax. Paraffine, to the extremely volatile fluid Rhigolene, used in minor surgery, having a specific gravity of .0625, and boiling furiously at a temperature of 70° Fahrenheit. They make a specialty of lubricating oils, a large demand for which exists in this country and in Europe. They are large manufacturers of the hydro-carbon wax, Paraffine, which is used chiefly in making candles, and considered fully equal to the best spermaceti for that purpose. Their products literally "sail the seas over and cross the wide ocean," a large portion of their business being derived from foreign countries. The greater portion of their exportations being to Northern Europe, Australia and the West Indies, although they shed *light* upon the benighted of all nations and climes, from Northern Russia to China and the East Indies. They have unrivalled facilities for handling their various products, and are able to load large ships with oil in three to four days time. The company estimate that five millions of bricks have been used in constructing their numerous buildings. They have iron tank storage capacity of 500,000 gallons, and use 32 iron stills of a capacity of 1,000 gallons each, in refining their various products, which are obtained entirely from the American (Pennsylvania) petroleum. They own a line of 50 tank cars, used in transporting the petroleum from the oil regions of Pennsylvania to their works in Boston. The company manufacture their own barrels, of a patent issued to Joshua Merrill, their Superintendent. They have capacity for making 175 barrels daily. They use 4 tubular steam boilers, fire-box pattern, built by John Lally of this city, of

LANGLEY, CARBEE & CO.,

MACHINISTS, BRASS FINISHERS,

AND PIPE FITTERS,

MANUFACTURERS OF AND DEALERS IN

Wrought Iron Pipes, & Brass and Iron Fittings, for Steam, Water and Gas.

Border Street, East Boston, Mass.

C. W. LANGLEY, MILO CARBEE, WM. P. LEAVITT, JR.

125 horse power each, or 500 horse power in all, which furnish motive power for their nine engines and steam pumps. They have one 80 horse power engine, built at the Globe Works of this city; one 40 horse power engine, made by Campbell, Whittier & Co., of this city; four smaller engines of various patterns, and three large steam pumps for pumping oil. To make this large amount of steam required, they use some 5,000 tons of coal annually. The company's offices in Boston are at Nos. 108 and 112 Water street; and in New York at No. 113 Maiden Lane.

LANGLEY, CARBEE & CO., removed to their new building Nos. 65 and 67 Border street, in the first of 1869. Their main building is 32 x 50 feet, three stories, wood. They commenced the manufacture of brass and iron fittings, for steam, gas and water in 1865. They employ from six to twelve men in their increasing business. An upright engine supplied with steam from an upright tubular boiler, 42 inches in diameter and 8 feet high, the latter built by E. Hodge & Co., of this city, supplies the power.

THE BOSTON FURNITURE CO., G. W. Safford, Treasurer, occupy three floors of a wooden building 100x55 feet, located on First street, also a five story brick building 150x35 feet, located at 135 Friend street, in which is their office and salesroom. They manufacture parlor furniture and folding chairs. This company commenced business in 1865 and employ 125 hands. Their machinery, consisting of 1 planer, 2 belt saws, 2 jig saws, 1 spring and 4 trimming saws, 2 circular saws, 5 boring machines, 1 jointer, 1 moulder and 2 turning lathes, is driven by an engine of 40 horse power, in building adjacent. This firm consume 36,000 feet of walnut lumber per year.

HENRY SOUTHER & CO. occupy a six story brick building 60x140 feet, used as a malt house; also, a brewery 60x100 feet, located at 528 Second street, for the manufactnre of ale and porter. They commenced business in 1862 and employ 40 hands. They consume 120,000 bushels of malt per year and turn out 50,000 barrels of ale and porter. A steam engine of 40 horse power, built by John Souther, drives their machinery.

DELAPORTE & CO. occupy a three story wooden building 150x40 feet, located at No. 294 Dorchester street, for the manufacture of chairs, arm chairs and sofas. They commenced business in 1864, have from 50 to 60 employees and turn out 150 pieces per week. Their machinery is driven by an engine of 35 horse power, supplied with steam from a cylinder boiler, 40 horse power. They have an office and salesroom at No. 129 Portland street.

THE CRYSTAL SPRING DISTILLERY, Felton & Stone, proprietors, occupy buildings covering about one-fourth of an acre of ground, and located on C, corner of Fifth streets, for the manufacture of the Crystal Spring New England rum. They commenced business in 1860 and have 10 employees. They are also agents for the sale of bourbon and rye whiskies.

IN 1827, with other business, the firm of A. C. LOMBARD & Co. commenced to import Nova Scotia grindstones, and were the first to start that trade in Boston. Since 1842 the business has been carried on by the firm of Lombard & Hall and Lombard & Co., in both of which Ephraim Lombard has been the senior partner. In 1863 Jacob H., and in 1868 Ephraim, Jr., were admitted members of the firm. In 1864 they bought the stock and trade in grindstones of Sprague, Soule & Co., 9 T wharf, and now, relying upon the long experience and good judgment of their senior partner, Lombard & Co. continue at the old stands, 9 T wharf and 13 Lewis' wharf, to import and sell the very best quality of grindstones, not trying to sell a cheap article, but endeavoring by careful selections in frequent visits to their quarries at Clifton and New Bandon, N. B., and Joggins, Nova Scotia, and by prompt attention to orders, to meet the large demands upon them from customers in all parts of the United States, for the *best grindstones* to be had. Every branch of manufacturing requiring a grindstone, can rely upon this house for promptness and good judgment in supplying them.

In connection with their grindstone business, Lombard & Co. quarry and import the famous Wallace freestone, now acknowledged by architects and builders to be the best in quality, handsomest in color and finish and cheapest in price of any yellow stone used in the States, and fast taking the place, in Boston, of the Connecticut brown stone.

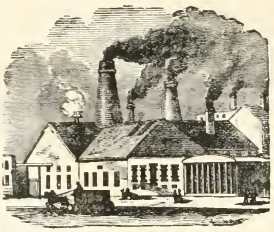
They also import and sell Turkey emery stone for the Washington Mills Emery Manufacturing Co., of Ashland, Mass., and do a general commission business in fruit, wool and gums, with other products from the Mediterranean.

(See page 196.)

THE firm of GOODNOW & WIGHTMAN of Boston, in addition to their business of selling all kinds of tools, both of foreign and American manufacture, have recently started an establishment for the manufacture of foot-lathes, and all kinds of small tools for the use of amateurs; this is a business comparatively new in this country, for although there are plenty of large machine shops in which are made all kinds of tools to run by steam power, it has been almost impossible for any one wishing to get a small foot-lathe suitable for home use, and the necessary chucks and tools to go with it, to find any place where they could obtain an assortment. It is the intention of this firm to make a specialty of this branch of manufacture, and to make small lathes, planers, drills, jig saws, and a great variety of other tools, suitable

MOUNT WASHINGTON GLASS WORKS.

Manufacturers of



and Dealers in

BLOWN & MOULDED

GLASS WARE,

In all its forms and varieties.

LANTERS, LAMPS, BRACKETS, BURNERS, ETC.

An extensive assortment always on hand, and all products are warranted equal to any house in the country.
Favors solicited, and all such executed promptly and with satisfaction. Address,

W. L. LIBBEY, - - - - - - - 61 Milk Street, Boston, Mass.

either for gentlemen of leisure who are blessed with mechanical tastes and desire to amuse themselves in making any of the thousand and one useful or ornamental articles that can be produced with the lathe, or for the scientific man who wishes to repair some of his apparatus, or construct new instruments for the investigation or illustration of new theories, for the inventor who prefers to make his own models of new inventions instead of trusting to unskillful or uninterested mechanics; or still better, for the boys who by learning the use of tools when young, will receive benefit which will be of life-long advantage.

South Boston Iron Co., Cyrus Alger & Co., proprietors, Wm. H. Howard, President; William P. Hunt, Treasurer, was founded by Cyrus Alger in 1809, and incorporated in 1827. They employ from 300 to 400 hands, and manufacture stationary and marine engines, mill work, steam hammers and all kinds of common trade castings. Also, ordnance and projectiles of all kinds. During the war, this establishment was constantly employed by the United States Government, and thousands of tons of ordnance and stores were furnished, including some 200 fifteen-inch Rodman guns. Since the war, they have furnished large quantities of heavy ordnance for the Chilian and Peruvian Governments. The fifteen inch gun lately sent to London for experimental purposes, was also made at this establishment. Their buildings cover 7 acres of land and are located within a mile of the State House.

The Fulton Iron Foundry occupy 100,000 square feet of land, located on Federal corner of Foundry street, for the manufacture of heavy machinery castings. They commenced business in 1835 and employ 100 hands. Their machinery is driven by a steam engine of 25 horse power, built by Isaac Adams. Their office is located on Broad, corner of Water street.

A. P. Morse & Co. occupy two wooden buildings. One 80x80 feet, and the other 20x35 feet, located at 187 First street, for the manufacture of sugar, molasses and rum hogsheads. They commenced business in 1840, and employ 40 hands.

C. B. Barrett, occupies six buildings, covering about one acre of ground, located at Mill Village, Stoddard, N. H., for the manufacture of all kinds of black glass ware. Established in 1862; employs about forty hands. Office and sales room 45 and 46 North Market street of this city.

Oriental Powder Co., occupy about one hundred wooden buildings, located at South Windham, Me., for the manufacture of gunpowder of all descriptions. This company was incorporated in 1859, and employs about 150 hands. These works were established in 1831. Office, 160 State street, of this city. W. H. Jackson, president; E. F. Newhall, treasurer.

Amos Haynes, occupies three buildings, located on the corner of Washington and Myrtle streets, East Somerville, Mass., for the manufacture of white wine and cider vinegar, and refined cider. Established in business in 1843; employs twenty hands. Office, No. 4 South Market Street of this city.

Boston Milling Co., occupy a two story brick building 85 x 50 feet, also a wooden L 50 x 60 feet, for the manufacture of flour of bone foundry facings and a general pulverizing business. Commenced business in 1867; employ 25 hands. The works are run by a 100 horse-power steam engine, Corliss pattern of Providence, R. I., have two horizontal tubular boilers 50 horse-power each, built by McKay & Aldus of East Boston, Mass.; consume 1000 tons of bone and 600 tons of coal for facings per year; do a business of $100,000 per year; office, 43 Broad street, in this city.

Shawmut Wire Works, Farrar, Follett & Co., proprietors. In these works, established in 1863, all the various grades of iron wire are manufactured, including buckle, broom, screw, fence, rivet, and spring wire; also wire for machinery purposes, made with care from refined metal, and straightened and cut to any length required. They are situated in East Boston, and consist of a main building 170 by 50 feet, three stories in height, with other buildings for galvanizing purposes, engine-house, &c. The works are accessible to vessels, being situated on a wharf, at which there is sufficient depth of water to allow ships of the heaviest tonnage to lay within twenty feet of the mill. Office, 73 and 75 Blackstone street.

Sheriff & Co., occupy a three story brick building 100 x 40 feet, located in Dedham, Mass., for the manufacture of brushes of every description; also manufacturers of the patent Dresser brushes. This firm have 100 employees. The factory is run by a fifteen horse-power steam engine, built by Hinckley & Williams, Boston, Mass.; one flue boiler, built by same firm; this firm do a business of $100,000 per year. Salesroom, 22 Exchange street of this city.

Boston Flax Mills, occupies twelve wooden buildings, covering about 50,000 square feet of surface room, located at East Braintree, Mass., in the manufacture of linen goods. Incorporated in 1852; employs four hundred hands. Office, 83 Commercial street, of this city.

John Preston occupies four buildings, containing about 13,200 square feet, located at Commercial Point, Dorchester, Mass. Office and salesroom, 162 State street, in this city, for the manufacture of chocolate and cocoa preparations. Established in 1768; employ three run of stone. Power furnished by a 20 horse power steam engine, built by Harrison Loring, of South Boston.

W. Baker & Co. occupy eight buildings, four for mills and four for store houses; the largest mill is run by an 80 horse power steam engine, built by the Putnam Machine Co. of Fitchburg, Mass. This firm was established in 1780, for the manufacture of chocolate and cocoa preparations. Located at Dorchester Lower Mills, on the Neponset river. Office and salesroom, 201 State street, of this city.

W. Wheelock & Co. occupy a two story wooden building, 24x48 feet, for the manufacture of shoes. Employ 25 hands; turn out 25 cases, (60 pairs per case,) per week; works are run by a calorie engine, Roper's patent, Boston, Mass. Do a business of $50,000 per annum. Commenced business in 1863. Salesroom, No. 112 Pearl street, of this city.

The American Patent Sponge Co. occupy a four story wooden building, 105 x 50 feet, with L, a two story brick building, 40 x 36 feet, located at Lebanon, N. H., for the manufacture of elastic sponge, a substitute for curled hair, for all upholstering purposes. Incorporated June, 1867; employ 30 hands. Have machinery adapted to the business, and turn out about 3,000 lbs. per day. Power furnished by an iron water wheel. Office No. 20 India wharf, of this city.

Josiah Webb & Co. occupy three 2½ story wooden buildings, located at Milton Lower Mills, on the Neponset river, for the manufacture of Webb & Twombly's premium chocolate and cocoa preparations. Established in 1843, employs about 20 hands. This firm was awarded a silver medal by the Maryland Institute, held at Baltimore in November, 1868. Office at No. 48 Chatham street, of this city, and No. 197 Chambers street, New York.

Putnam & Cochran occupy a 2½ story wooden building, containing 10,000 square feet of room, located on Souhegan river, town of Wilton, N. H., for the manufacture of black walnut, chestnut and pine chamber sets, wardrobes. Salesroom No. 40 Richmond street, of this city. Established in 1864. Has 50 employees, and the most improved machinery. Power furnished by a Ryder 35 horse power iron water wheel. Also, a 15 horse power engine, to use in case of necessity.

FARRAR, FOLLETT & CO.,

IMPORTERS OF

METALS,

TIN, ZINC,

—AND—

SHEET IRON,

ALSO,

Manufacturers of all descriptions of

IRON WIRE.

73 and 75 Blackstone Street,

BOSTON, MASS.

The Mount Washington Glass Works were established in 1847, by Jarves & Cormorais, at which time glass was produced. This firm continued till 1861, at which time they were succeeded by Messrs. W. L. Libbey & Howe, both for years with Messrs. Jarves & Cormorais. Mr. Howe died in 1866, and the works are now carried on by W. L. Libbey, Esq., under the old title of the Mount Washington Glass Works, which comprise 10 buildings, with the following dimensions: Storehouse, 40x103; lead room, 30x48; factory, 58x82; mixing room, 14x90; brick building, 36x50; wood building, 48x24; cutting shop and counting room, 85x25; wooden building, 100x25; cementing room, 38x48; general room, 20x20.

There are from 125 to 175 men and women employed here, making the finest quality of flint, ruby blue, opal and green glass, producing from 2,000 to 2,500 lbs. of glass daily. The business amounts to from $200,000 to $250,000 annually. An engine made by S. E. Chubbuck & Son, of this city, supplies the power. The producing capacity of these works is soon to be increased, so as to turn out at least double the present amount, which is necessary to meet the demand of their increasing trade. Agents:—Deming Jarves, Jr., 60 Barclay street, New York; F. A. Butler, 236 Arch street, Philadelphia; and R. Edwards, Jr., & Co., Baltimore. (See advertisement, page 202.)

Tufts Brothers, 42, 44 and 46 Sudbury street, manufacture dry and wet gas meters, meter provers, test, experimental and station meters; also, port and starboard side lights, and ship, railroad, street and patent signal lights, under patents issued by them in 1860. Their lanterns are extensive-

TUFTS BROTHERS,

Patentees and Manufacturers of

DRY GAS METER,

PATENTED, AUGUST, 1860.
N. TUFTS, JR.

DRY AND WET GAS METERS,

METER PROVERS,

TEST, EXPERIMENTAL and STATION METERS,

42, 44 and 46 Sudbury Street,

BOSTON, MASS.

SIGNAL LANTERN,

PATENTED, MARCH, 1860.
A. TUFTS.

PORT and STARBOARD Side Lights,

Ship, Railroad, Street and Patent

SIGNAL LANTERNS,

42, 44 and 46 Sudbury street,

BOSTON, MASS.

ly used on the many railroads of the United States, and are universally liked wherever exhibited. The many persons they employ are kept busy to supply the immense demand for the above.

City Iron Foundry, Vance & Co., proprietors. 198 Second street near C st., manufacturers of columns, grate bars, sash weights, and all kinds of machinery castings. In the year 1866, this company commenced the present business, which they continue to carry on. They occupy three buildings, the first being 60x40 feet, two stories, wood, used for brass foundry and pattern shop; second building, 70x40 feet, one story, and built of wood, which is used for iron foundry; third building, 80x30 feet, and used for engine and boiler room; also, ware house. From 20 to 25 men is the number of employees. The amount of iron used per month is about 75 tons. A 15 horse power engine, having one tubular boiler, furnishes the motive power.

Joseph Frye manufactures all kinds of carriages; also, sleighs. The manufactory is in what is known as Washington village. The business was established by Joseph Frye in 1845. The size of the main building is 100x20 feet and 2 stories high, built of wood; and an ell 30x30 feet, 2 stories, also wood. The average number of employees is 15. Post office address, South Boston.

Boston Car Spring Co. This company was incorparated in the year 1867. Goods manufactured, car springs, packing, valves, &c. Size of building, 35 x 100 feet, three stories and built of stone; average number of employees 20. A Putnam Machine Cos. engine of 70 horse power and two tubular boilers built by Cook, Rymes & Co., furnishes motive power. Amount of goods manufactured per day, about 1000 pounds. A. Emerson, president; Loring W. Muzzey, treasurer; H. P. Dunbar, superintendent; office, 51 Devonshire street; factory at Roxbury district.

Wm. T. Van Nostrand & Co., brewers of pale and ambre ales, &c., and dealer in malt and hops, situated corner of Eight and G streets. The business was established in 1863 by Wm. T. Van Nostrand & Co. The brewery is a large brick building 104x45 feet, part being 4 and part 5 stories. There are 25 hands employed. A 15 horse power engine furnishes what power is needed. The engine was made by Campbell, Whittier & Co.

Muldaur, Summerfield & Thayer, manufacturers of all kinds of neck ties. Mr. E. H. Muldaur established the business in the fall of 1866. They occupy 2 stories in building 106 Summer street, the first floor being 75x18 feet, and second story 40x18 feet. Employees average 45 and 3 travelling agents. The amount of goods turned out per month is about 1,200 dozen ties.

Franklin Grant, paper box manufacturer. Business was established in 1856. There is occupied, 1 story building, 142 Washington street, the building being about 50x70 feet. Number of hands employed, 12; 12 tons of straw paper are used per year, and 50 reams of covering paper. Also, about 100 reams of colored and fancy papers. Manufactures the principal kinds of paper boxes.

W. C. Donald & Co., printing inks in all its varieties are manufactured by this company at their factory at Andover, Mass. They are sending their inks to many places, from the Canadas to the Gulf. The business was established by W. C. Donald during the year 1856. Most of the buildings are brick and are eight in number, covering about 3,000 square feet. They are one, two and three stories in height. There are a number of furnaces used for making black, (known as lamp black) for the ink. Eight hands are employed in the factory; a fifteen horse power engine furnishes motive power; there is also one common tubular boiler. Salesroom and office, 12 Spring lane, of this city.

James P. Ingols & Co., brass founders. This company was established by Mr. Davis, a sailor, about 23 years ago, and was succeeded by the present firm about 7 years after; they occupy a wooden building with brick floors, 60x65 feet, three-quarters of the building being one story, and one-quarter two stories. They employ 11 men, and manufacture brass, copper and composition work in general, also lining metals.

The Lowe Printing Press Co. is engaged in manufacturing a portable printing press, which is used by printers, druggists, merchants, clergymen, lawyers, and many other business men, who are enabled to do their own printing. Number of employees, 6 to 8. There are 500 presses turned out per year. Steam power is used in both factories. Within a few years many presses have been sent to many of the foreign countries. Printers recommend them for proof printing, as being very handy and saving much time in blocking and setting to a large press. By the references from literary and noted persons in other pursuits, its practicability is very evident. The Lowe press is the original portable press, and the only one having received a silver medal. Office, 23 Water street; mills at Walpole and Canton, Mass.

Fuller & Bigelow manufacture skirt tapes and crinoline steels. During the spring of 1866, Mr. A. L. Fuller established the business, which, after a time, was enlarged to its present extent. Employment is given to about 75 hands. One 30 horse power breast wheel furnishes the motive power used to run the 40 tape looms, having about 700 shuttles, and the 500 braiders used for covering the steel wire. Amount turned out per week, about 15,000 yards of tape, and $2\frac{1}{2}$ tons of wire. Mills and office at Clinton, Mass.

Fuller & Bigelow also run, at Holden, Mass., 1 mill, which turns out about 3,000 lbs. cotton yarn, from Nos. 20 to 30. All the yarn spun at this factory is used for the tape and skirt steel made at Clinton. Office at Clinton Mill.

Same company as above run, and, in part, own one mill at Warwick, R. I., which is run on same kinds of yarns as at Holden, except in making Nos. 20 to 60. Peirce, Fuller & Bigelow,—office at Pawtuxet, R. I.

Bigelow Mills, Hamden street, Boston, formerly East street, Roxbury. Incorporated during the summer of 1868. Capital $50,000 in shares of $50 each. Kinds of goods manufactured, cotton, silk and worsted; also skirt tapes, ribbons, braidings, fringes, &c. President, J. H. Stephenson; Agent, E. W. Bigelow. There is occupied two buildings, each $2\frac{1}{2}$ stories, and about 70 x 36 feet, built partly of wood and brick. All the dyeing and bleaching for the works are done at the mills in their appropriate buildings. Number of hands engaged in mills, about 100. There are 50 looms running, having some 1,000 shuttles. Number of looms for cotton, 25. Same number of looms used for silk and worsted. Have capacity for preparing silk for 25 looms. One 40 horse power engine, and one tubular boiler, furnish motive power.

Pierce, Barrell & Co., manufacturers of carpet, pebble grained, leather, plush and canvass slippers. Business was established during the year 1865. There is occupied four floors in building 140 Pearl street, each 65x25 feet. Number of machines running, 10; hands employed at present time, 45. Amount of goods sold, $30,000. One 15 horse power engine is used.

J. B. Leonard & Co. Slippers of all kinds are made by this company. Factory and office are at 141 Pearl street, where they occupy four floors, covering some 9,000 square feet. Average number employed, about 40. Business was commenced in 1868.

There is averaged about 5,000 pairs of slippers turned out per week. Number of machines used, 12.

The Boston Lead Co. The number of establishments in this country devoted to the manufacture of the various products of lead is rather small, when compared with those in other departments of manufacturing industry. The largest of these is the Boston Lead Company, whose works are at Roxbury. This company was established about forty years ago. At the outset its business was comparatively small—its yearly product amounting to only 1,000 tons of lead per year. Since that time it has not only largely increased this amount, but has embarked in other departments of lead manufacture.

The works of the company are very extensive and complete in equipment, covering three acres of ground. The main building, used for the manufacture of white and sheet lead and lead pipe, is 200x60 feet, and 3 stories high; the corroding house is 205x70 feet; the building used for manufacturing oxide of lead and the kegs in which the lead is packed, is 145x60 feet, and three stories high.

It is a noteworthy fact that every pound of the immense quantity of lead used by this company, during the past five years, has been imported. In view of the extensive deposits of this mineral in the Western States, it seems strange indeed that the company should be forced to go abroad for its supply of raw material. But the yield of the Galena (Illinois) mines, which are the principal ones of the country, have largely diminished of late years. In 1842 they produced 31,353,630 pounds of pig lead, the average price of which was $2 24; in 1845 the production was 54,494,860 pounds, which was sold for $2 96; the production from this time forward steadily decreased up to 1855, when it amounted to only 30,125,550, which was sold at $6.

Since the year 1848 we have been dependent on foreign countries for the bulk of the lead used in this country. In the year 1854 there was imported into New York alone nearly 60,000,000 lbs. of foreign lead. Since 1848 a strong and persistent effort has been made to have pig lead placed on the free list. Not only importers of this article but manufacturers of its products, joined in the effort—the latter only asking for a duty on its products, not on the lead itself. In 1857 the duty was reduced from 20 to 15 per cent., and under the present tariff it is 3 cents per pound.

The Boston Lead Company are now running eight paint mills in oil and six dry. In addition to white lead and zinc, which constitute their specialties, they manufacture red lead, litharge, sheet lead, lead pipe, &c., in great quantities. The products of these works sustain the highest reputation for purity and general excellence, and are in demand from all parts of the country; but the bulk of them is absorbed by the New England trade. The manufacture of these goods is an operation that requires no small degree of skill and science, and the long experience of the executive officers of this company and the ability of its employees, gives the establishment no small advantage in this respect. The process of manufacture, though comparatively unfamiliar to the general public, is an extremely interesting one.

The agents of this company in Boston are Messrs. J. H. Chadwick & Co., of 49 and 53 Broad street—the firm comprising J. H. Chadwick, W. J. Bride, (late of Geo. L. Stearns & Co.) and E. D. Ingraham. One of Edmands & Hamblet's telegraphs connect their office with the factory, and secures the speediest communication between the two points.

E. J. Lane & Tuttle, of 19, 21 and 29 Hawley street, this city, and 25 White street, New York, are among the most extensive manufacturers of silk and worsted goods in the country. Indeed, this is the only house which manufactures silk and woolen goods combined. Their factory is on Hawley street, a building five stories high, and in which 600 hands and 40 to 50 machines are employed. An engine of forty horse-power propels the machinery. They have re-

cently added to their works six Jacquard looms for weaving silk and woolen scarfs, and make a specialty of head-nets, belting, and knit worsted goods. Other important improvements are in progress, and they will soon be able to manufacture fancy woolen goods of all kinds. This firm was established in 1863, employing at the outset only 25 hands. By energy and industry the business has been so largely increased as to require the services of the number now employed—600.

THERE is a horse-trot every day except Sundays at 90 Sudbury street, Boston—C. H. TROTT & Co., who are engaged in the manufacture of horse clothing. They employ 30 hands and turn out 1,000 blankets, sheets, &c., per week. At present they are running six sewing machines, but are about to increase this number to ten and their working force to fifty hands. The firm has been established about one year, but the senior partner has had five years experience in the business. The rapid increase in their trade has compelled the enlargement of their facilities above noted.

THE Stevens patent tower clock is made by G. M. STEVENS & Co., at 90 Sudbury street, Boston. These clocks which are of proverbial accuracy, are in use in almost every State in the Union. They cost from $200 to $2,000 each. The firm employ five to ten hands and their machinery is driven by a ten horse power steam engine. They also manufacture a good many tog bells, having at present many in process of construction.

J. R. CLIFFORD & Co., of 86 Sudbury street, Boston, are now running three factories—at Springfield, Randolph and Winchendon, in the manufacture of Thayer's patent combination tack hammers. Of these they turn out 5,000 to 7,000 dozen per week, employing 100 hands. The hammer is light, neat and compact, and comprises a hammer with nail claw, tack-lifter, screw-driver and rule.

THE company now known as the HOWARD WATCH AND CLOCK COMPANY, of this city, began business in 1851, under the name of the Original Watch Company, occupying a building 100x20 feet and two stories. In 1863, the corporate name was changed to the Howard Company, and the factory has grown to be a quadrangular structure 100 feet on each of the four sides, and four stories high. The company now employ 200 hands, and their machinery is driven by a steam engine of 30 horse power, built by Campbell, Whittier & Co. of this city. Every part of watches and clocks, including the wood work and decoration of the latter, is made in the factory. The tools used in the business are also made on the premises, nine accomplished mechanics being constantly engaged in their manufacture. The factory is in Boston Highlands, (late Roxbury;) the salesroom and New England Agency, at 114 Tremont street; and the New York office at 3 Maiden Lane. E. Howard is treasurer of the company.

AN idea of the immense amount of clothing required for the use of thirty odd million people may be obtained from a statement of the business of a single firm of clothing manufacturers in this city. WHITON, BURDETT & YOUNG employ 30 cutters and 5,500 sewers. They are sending out every week 300 huge cases of cut garments to be made up in Maine, New Hampshire, and the interior of this State. Every garment made by them is carefully inspected by the foreman three times—after it is cut, when it comes from the maker, and before it is taken to the salesroom.

THE TORRENT ROTARY PUMP has long been esteemed one of the most efficient ever invented. It is manufactured by H. M. Wiswell, of 49 Portland street (late of 46 Congress street,) Boston. He has facilities for turning out 1,000 pumps per year of various sizes. The fire pump, of which 3 sizes are made, is in especial favor with manufacturers.

THE apparatus for washing coffee, invented by REINHOLD LANDSTROM, is used by Noah Davis & Co. of this city, exclusively. This apparatus, in which the heat is gradually conducted through soapstone, is said to preserve the aromatic flavor of the coffee more completely than any other method of roasting. The coffee mill of Messrs. Davis & Co. is at 63 Charlestown street, Boston.

THERE are now in use 7,000 of BUERK'S WATCHMAN'S TIME-DETECTORS, by large manufacturing, railroad and other corporations. These instruments, which were introduced about five years ago, have been materially improved, of late, and are giving perfect satisfaction. They are made by J. E. Buerk, of 47 Congress street, Boston.

THE business of manufacturing knit goods has expanded to enormous dimensions within a few years. C. W. GRIFFITH'S case is an illustration. He started 15 years ago, working alone; he now employs 360 hands. His factory on Pearl street, includes six lofts, of 95 by 25 feet each. He runs 13 looms on Nubias, and 8 looms on Cardigan jackets, besides several others on other goods. By a recent improvement in machinery, devised by himself, he can produce Cardigan jackets and Affghans by machinery that can hardly be distinguished from hand-work, and which are 50 to 75 per cent. cheaper. He also has works in Roxbury, for the manufacture of silk belting, gimps, fringes, imitation haircoils and braids, etc., running fourteen Jacquard looms of twenty shuttles each. Of this hair work he turns out 80 to 100 dozen per day; of heavy knotted fringe he makes 250 pieces of twelve yards each, and of belt ribbon 400 pieces of six yards per day. At this factory he employs 100 hands. The salesrooms are at 16 Milk street, Boston, and 97 Franklin street, New York.

THE works of J. BLACKBURN & Co., manufacturers of hoop skirts, at 186 Washington, corner of Franklin street, The firm occupy three lots 75x25 feet, employ 50 hands and turn out 25 doz. skirts per day. These skirts are made of the best material and in the most careful manner, exclusively for the retail trade.

IRVING'S PATENT EXCELSIOR STEAM HEATING APPARATUS, for public buildings, dwellings, &c., is manufactured by Messrs. Perham, Drew & Co., at 52 Sudbury street, who also produce wrought iron steam and gas pipes, brass and iron fittings, &c. Mr. Perham, of this firm, has had a practical experience of over 20 years in the business.

WHITING'S IRON FOUNDRY on Kemble street, Boston Highlands, was established in 1852, and has been under charge of Mr. L. F. Whiting since 1861. Four buildings are used for moulding and casting, and 90 hands employed, who cast 1,500 tons of iron per year into columns and pillars for stores and public buildings.

THE name of ASHCROFT is recognized by all machinists as belonging to some of the most useful and valuable inventions of the present day. Among these are Ashcroft's steam guage, a most effective instrument, of which E. H. Ashcroft manufactures large quantities; Ashcroft's low water detector, a safeguard to the boiler, of which over five thousand are now in use. In order to accommodate their increasing business, Mr. E. H. Ashcroft has erected a new building, Nos. 51, 53 and 55 Sudbury street, this city, 140 feet in length by 47 feet wide, five stories in height, with an L of six stories. A spacious basement beneath the whole, serves as a piping room; on the first floor is the salesroom of the establishment, which includes blacksmith shops, brass and pattern rooms, foundry, etc. The business of the firm, with its new facilities, will doubtless be largely increased. Mr. C. E. Ashcroft is general superintendent of the business.

E. WILSON & Co. are manufacturers of piano hardware of all kinds. Business was established during the year 1867.

They occupy one story in building on Albany street, being 55x20 feet. Use part of steam engine of 60 horse power. In addition to piano hardware, this company are doing a general machinist business, employing at present 4 persons.

S. K. Taylor & Co. are manufacturing cutters and dies for boots and shoes, suspenders, collars, cuffs, paper boxes, envelopes, labels, &c., &c. S. K. Taylor, commenced business in 1857, in Marlboro, Mass., but since removed to 145 South street, of this city. Averaged number of employees 12 to 15. Size of building 50x50 feet, and 1 1-2 stories high. The amount of goods turned out per month $2,000. Part of a 100 horse power engine is used.

Potter & Smith, manufacturers of Patent Pivot Action Shoulder Braces. This is an invention of B. J. Greeley, who established the present business in the spring of 1868. There are employed an average of 25 hands, who work up something over $400 worth of stock per week. Office and factory is situated at 58 Summer street.

Sweeney & Bradley. This company commenced business in the fall of 1868. The kind of carriages made are mostly light and fancy ones; also, all kinds of nice driving sleighs. The building is built of brick, being 3 stories high, with basement, and about 25x100 feet. The number of employees is about 15. The parts of work requiring steam power are done away from the factory. They give particular attention to fancy painting.

Rumford Food Laboratory, manufacturers of choice articles of prepared food. The manufacture of these articles is under the supervision of Professor Blot. Business commenced and company incorporated during the year 1867. There are occupied 3 buildings, the main one being 5 stories high and 120x50 ft. deep, an ell 75x60 ft. part being 2 and the rest 5 stories, a large part of this building used for kitchen and canning purposes. There are employed about 27 hands at the present time, turning out from 20,000 to 25,000 cans of preserved food per month. There is an oscillating engine of six horse power and one boiler, made by Thomas Cunningham. The cans are all made in the company's building. In the kitchen there are three boilers, each having a capacity of over 200 gallons, and three of 30 gallons each.

Lowell & Brett, manufacturers of envelopes, fine wedding and epistolary, and nice paper, (all hand made) from best American, English and French papers. This company is the only one manufacturing fine wedding paper in the New England States.

Messrs. King & Adams commenced the manufacture of oak tanned leather belting in 1862. Their factory is situated at 22 Milk street, where they occupy three floors, containing 8,000 square feet, the upper floor being used for currying, and when curried is carried to the stretching room; they have in use about 100 stretchers, capable of stretching thoroughly 8,000 sides per annum. The lower room is used for manufactory and salesroom; they employ from 7 to 10 men and manufacture all kinds of machine belting, loom strapping, belt cord, worsted aprons, sewing machine bands, and also dealers in every description of belt and lace leather, belt hooks, &c.

A. N. Clark & Co., manufacturers of oak tanned leather belting. The history of leather belting, as a distinct business, dates back to the year 1847, at which time N. Hunt and Frederick Jacobs commenced the business under the name and style of N. Hunt & Co. Previous to this, individuals made their own belting as best they could. In order to meet their necessities, a prosperous business soon grew out of this enterprise. In 1857, Mr. Hunt retired from the business, having sold out his interest and good will thereof to A. N. Clark; since which time, in the fall of 1858, Mr. Jacobs died, leaving Mr. Clark to continue the business, at the same place, on Devonshire street, Boston, under the name and style of A. N. Clark & Co. This company state that they have never employed a "drummer," or "travelling agent," in their business, but have depended upon the quality of their goods as making their customers their best advertisers. They employ through the year from 10 to 12 men, and cut up from 10,000 to 15,000 sides of the best oak-tanned stock per annum.

Abel W. Tripp, agent and manufacturer of Roper's patent improved hot air engine. This engine uses no water; requires no engineer; no extra insurance, and cannot explode. Shop heated and running expenses, 25c per 10 hours, each horse power. The manufacturer of these engines was commenced by the inventer, S. H. Roper in 1861, but more recently Mr. Tripp has engaged in the manufacture of them. Size of building now used, covers from 2,500 to 3,000 square feet. Number of present employees about 10. Make engines from 1 to 4 horse power. Attached to these engines is a regulator of Mr. Tripp's invention which overcomes many of the objections often raised to hot air engines.

Washburn's Manufactory of Blinds and Sashes.—The above manufacturing establishment was started in Taunton, Mass., in the year 1855, and has since steadily increased its facilities for manufacturing articles necessary for the trade. They employ about 25 hands and manufacture over 50 different styles of hinges and fasteners for hanging and locking blinds. They claim that more tons of the above goods go from their establishment per annum than hundred pounds from many others.

The stock at Washburn's Manufactory include all the articles required by the maker or dealer in doors, sashes and blinds. The iron used by them in the manufacture of their hinge work is imported, as the prices in foreign markets are lower than in ours. Zinc is also imported from the largest manufactories in Europe for the making of glaziers' points and the supplying of their jobbing trade. They are agents for the manufacture of the best English window glass, the St. Helens Glass Company, also the well-known brand produced by Samuel Richards, of Philadelphia, of the American Glass Company.

Putnam's Spring Bed & Bedding Manufactory. This establishment was for the past 20 years situated on Washington street, but have lately owing to the removal of the old building, erected near the old spot a 5 story substantial brick building No. 6 Beach street, where they continue to manufacture their well known spring beds and all kinds of mattresses. They keep some 25 hands busily at work. The upper story is particularly adapted to their carpentering work; the fourth is used for the manufacturing of beds; the third is divided off for their mattress makers, and a spacious feather room where a large brick oven has been built expressly for the baking of feathers; in the second story there is a large assortment of mattresses, spring beds, ticking, &c., &c.

Conant Brothers, manufacturers of hoop skirts. This company's factory is situated at 72 Summer and 23 Otis streets, where they occupy about 7,000 square feet of room. They commenced their present business in the year 1858, and employ from fifty to one hundred hands.

Boxford, a station and town on the Lawrence Branch, about 26 miles from Boston. The town was incorporated in 1685.

BOYLSTON STREET, 3 miles from Boston, on the Boston & Providence and Stoughton & Dedham Branch Railroads, a station on the suburbs of Roxbury District.

BRADFORD, 32 miles from Boston and 79 from Portland, a station and town on the Boston & Maine Railroad. The surface is uneven and soil various, but much of the land is of superior quality. The town was incorporated in 1675, and is situated on the Merrimac river, opposite to the city of Haverhill. The Newburyport Branch connects here.

BRAGGVILLE, 9 miles from South Framingham, 30 from Boston and 32 from Worcester, a small village on the Milford branch of the Boston & Albany Railroad.

WILLARD BRAGG occupies a four story wooden building 40x60 feet, located on South street, for the manufacture of men's, boys' and youths' thick and kip boots. Commenced business in 1833, employs 70 hands, turns out 60 cases of boots per week and does a business amounting to $100,000 per year.

M. C. BRAGG occupies a three story wooden building 40x 60 feet, located on South street, for the manufacture of men's, boys' and youths' thick and kip boots. Commenced business in 1840, employs 70 hands, turns out 50 cases of boots per week and does a business amounting to $100,000 per year.

BRAINTREE, 10 miles S. by E. of Boston, on the South Shore and Old Colony and Newport Railroads; a station in a township by the same name. This town formerly included Quincy and Randolph, and was first called Mount Wallaston. It is celebrated for the antiquity of its settlement, 1625; and for the eminent men it has produced, both in church and state. The surface of the town is variegated by hill and dale, presenting many delightful views of Boston, its harbor and the adjacent country. The Manatequot river, which rises in Randolph, after meandering through the town and receiving the waters of Great and Little ponds, meet the tide waters of Boston harbor at Braintree landing, 11 miles from Boston. Population 1837, 2,237. In 1867, 4,500.

FRANKLYN, SHAW & CO. manufacturers of boots and shoes, commenced business in Weymouth, Mass., in 1854, and moved to Braintree in 1857. This firm occupies one building, wood, three stories, 30x60, employs upwards of sixty hands, and turns out on an average, 40 cases per week.

LEWIS RICHARDS, manufacturer of boots and shoes, established business here about the year 1848. Mr. R. employs 15 hands and manufactures at the rate of six cases per week. He occupies one building, wood, two stories, and has capacity for turning out from 25 to 30 cases per week.

THOMAS VINTON, manufacturer of boots and shoes, established business here about the year 1838. He employs 12 hands and manufactures from 50 to 60 cases per month. Mr. Vinton manufactures entirely for the California trade.

PERLY STEADMAN, manufacturer of emery cloth, established business here in 1862. He occupies one building, wood, with brick basement, three stories, 20x45. He has a capacity for manufacturing from sx to eight reams of emery cloth per day, and producing an article second to none in the market.

A VERY extensive shoe and leather establishment was erected at Braintree, by B. T. LORING, in the spring of 1869. The building is 100x60 feet, and five stories high. The yard and lower story is used for tanning hides; the second story for currying; the third by heavy shoe-machinery; the fourth for cutting and light work; and the fifth for dressing and packing. The building is warmed by means of 6,000 feet of pipe put in by Daniel Lee, and power and steam furnished by a 25 horse power engine and a 50 horse power boiler, both built by Campbell & Whittier. The establishment gives employment to 300 hands.

BRALEY'S, 8 miles from New Bedford, a country station on the New Bedford and Taunton Railroad.

BRATTLE STATION, a flag station situated 1 mile from the village of Arlington and 5 from Boston, on the Lexington & Arlington Railroad.

BREWSTER'S. This village of about 800 inhabitants and 2 churches, is composed mostly of retired sea captains, who, in the decline of their years, are enjoying their immense wealth. It is situated about ½ a mile from the depot, 90 miles from Boston and 3 from Orleans, on the Cape Cod Central. The Indian name for this town is Sawkatucket. It took its present name from Elder Brewster, one of the first settlers of Plymouth. From three ponds in this town, covering about 1000 acres, a never-failing stream of water is produced, valuable for manufacturing purposes.

BRICK YARD JUNCTION, 4½ miles from Boston, and 6 from Waltham, a station where the Watertown Branch and Lexington Branch join the Boston & Fitchburg Railroad.

BRIDGEWATER, 27 miles from Boston and 21½ from Taunton, on the Old Colony & Newport Railroad, a manufacturing village containing 6 churches and 4,000 inhabitants. The State Normal school is situated here.

BRIDGEWATER IRON MANUFACTURING COMPANY. This business was established in the year 1810, under the style of Lazell, Carey & Co. A new partnership was formed in 1816 under the style of Lazell, Perkins & Co. On June 18th, 1825, this company was incorporated, but have continued the transaction of business under the firm style of Lazell, Perkins & Co., this firm being so extensively known. They occupy 28 buildings, known as work shops, pattern shops, storehouses, &c., covering about 80 acres of land. The dimensions of some of their larger buildings are as follows: rolling mill, 244x132; machine shop, 200x150; 1 forge, 140x100, and 1, 70x40; charcoal foundry, 130x90. This company consumes about 10,000 tons of soft coal, 1,500 to 2,000 tons of hard coal annually and about 800 bushels of charcoal per month. The power is furnished by 5 steam engines and 11 water wheels. The engines were all built at their own shop, one of them being of Mr. James Ferguson's patent, the first one of the kind ever manufactured. Mr. Ferguson is now superintendent of these works.

In the foundry there are two cupola furnaces, capable of melting 10 tons of iron per hour, and one air furnace capa-

"EAGLE" COTTON GINS.

Manufactured only by

BATES, HYDE & CO.,

BRIDGEWATER, - - - MASSACHUSETTS.

OFFICES:

39 KILBY STREET, BOSTON. 187 WATER STREET, NEW YORK.

61 ST. CHARLES STREET, NEW ORLEANS.

ble of melting 12 tons. They have facilities for furnishing daily 4 tons of copper or yellow sheathing metal. They also have 44 nail machines, capable of turning out 1400 kegs of nails per week, also a rolling mill for the manufacture of tack plates, capable of turning out 1,500 to 2,000 tons per year. It is said the largest tack manufactories in New England are supplied principally from these works. In their machine shop they use an immense slotting machine. Its weight is 46 tons. They also use a very large lathe that will turn a shaft 45 feet long, one that will turn 45 feet and swing 30 feet. They have built for their own use a lathe, the weight of metal used in the construction of which is nearly 25 tons. They have also made a monster boring and drilling machine, the weight of which is nearly 65 tons, probably the largest in the world. This company are the sole builders and proprietors of the "Willard steam hammer," invented by Charles Willard, Esq. The capital of this company is $96,000, and its success is greatly attributed to the extraordinary ability, great energy and experience of the Treasurer, Nahum Stetson, Esq. George B. Stetson, Esq., son of the Treasurer, is travelling agent. Office, 73 Pearl street, New York.

Southern Cotton Gin Co. This company was established here in 1867, by Mr. J. E. Carver. In 1861, Mr. H. T. Pratt associated himself with Mr. Carver, under the firm of Carver & Pratt. They occupy one building (main), wood, 2 stories, 30x50 feet; packing room, 1 story, 100 x 30 feet; 3 buildings for machinery department, 80x30 feet, and blacksmith shop, 30x40 feet. This company employ about 30 hands and consume in their business 200,000 feet of lumber per annum.

Bates, Hyde & Co., Proprietors of the "Eagle" Cotton Gin Manufactory, located on the Old Colony & Newport Railroad, near the station in Bridgewater. Were established for the manufacture of the "Eagle" cotton gin, in 1833.

The factory buildings cover an area of about 25,000 square feet, mostly three stories in height, When in full operation, they employ about 200 hands, turning out from $200,000 to $250,000 worth of cotton gins annually, which are in use in all the cotton growing countries. The machinery is propelled by a "Corliss" steam engine of about 45 horse power, working often to a much higher rate.

Offices of the company: 39 Kilby street Boston, 187 Water street, New York. 61 St. Charles street, New Orleans.

P. O. address, Bates, Hyde & Co., Bridgewater, Mass.

BRIGHTON, 5 miles from Boston, and 39 from Worcester, a village and town on the Boston & Albany Railroad. This town was formally a part of Cambridge. The soil is excellent and highly cultivated. This is the cattle market for New England.

Boynton, Swallow & Co. This firm manufacture lard oil; white, chemical, scouring, bleaching and family soaps, occupying 19 buildings, as follows: Slaughter house, 40x50 feet, one story, with facilities for slaughtering 120 hogs per hour; ice house, 55x100 feet, 2 stories. In this building they have one of A. R. Hudson's patent lard coolers, capable of cooling 4,000 lbs. lard at a time. An engine of eight horse power is used for driving the machinery. The third building 40x50 feet, is used for trying out lard and making oil. This building contains 18 beam and 4 hydraulic presses; also, 3 tanks for refining lard, capable of holding 25,000 pounds. Scrap building, 20x70 feet, is used for trying out hogs, and pressing, cutting and grinding beef and pork scraps. In this building they have 2 screw presses, driven by an engine of 6 horse power, used for re-pressing scraps, and for driving the grinding and cutting machines. Steam is furnished from 2 tubular boilers of 40 horse power each, used for propelling the engine, and for heating water for scalding purposes, and for rendering and refining lard and oil. There are 3 buildings attached, making it 125 feet in length and 25 feet in width, used for a stable and wagon shed, soap house, with 2 kettles capable of holding 200 gallons soap. Office building, 18x22 feet, one story, of wood. Smith's shop, where all the repairs are made, 25 feet square, and 2 ice houses, 45x30 feet each. The above establishment is situated on Howard place, where are employed, on an average, 40 hands. They have an office in Boston, at No. 46 North street.

Jackson & Co., occupy two wooden buildings, one 30 x 80 feet and the other 40 x 44 feet, located near the Boston and Albany Railroad station. Manufacture tallow candles for the foreign markets. The business was established by Mr. Jackson about 50 years since, and has been carried on by this firm since 1855. They employ eight hands, and melt annually 500,000 pounds of tallow, producing 225,000 pounds of candles.

George Gray, occupies a one story wooden building, 9 x 200 feet, located on River street, where he manufactures every description of clothes lines. He commenced business in August, 1867 and employs one person.

James Arkerson occupies a wooden building 1000 x 20 feet used as a rope walk; another, 24 x 60 feet used as a store house, and one 30 x 24 feet used as a tar-house, situated on Western Avenue, where he manufactures cordage and ropes. Commenced business in 1855 and has twenty employees. He has in use three sets of machinery which are driven by an engine of eighteen horse power, built by Hinckley & Drewry, of Boston, Mass., supplied with steam from a boiler of twenty horse power.

BRIGHTON STREET, situated on the Charles river, 5¼ miles from Boston and 32 from Woonsocket, on the Woonsocket Division of the Boston, Hartford & Erie Railroad. The village of Brighton is situated about two miles from here on the Boston & Albany Railroad, Worcester Division. The city of Boston is building a large reservoir here, capable of holding sufficient water to supply the city for five weeks.

BRIMFIELD, 79 miles from Boston, 9 from Springfield and 121 from Albany, a station on the Boston & Albany Railroad, containing about 100 inhabitants.

THE MAPLE VALLEY MILLS were established in 1865. The mill building is three and a half stories high, 105x35 feet. They manufacture broadcloths and doeskins and employ 40 hands. Run 3 sets and produce daily about 500 yards of cloth, doing business to the amount of $140,000 per annum. Their machinery is driven by a water wheel under 40 feet fall. Almy & Co., Agents, New York and Boston.

BROOKFIELD, 67 miles from Boston, 31 from Springfield, 57 from Hartford and 133 from Albany. A village containing four churches and 1500 inhabitants, in a town by the same name, on the Boston and Albany Railroad. The Indian name to this town is Quaboag, a large, fertile and beautiful township, well watered by several large ponds, which give rise to a principal branch of the Chicopee. A mineral spring of some celebrity is located here.

E. TWITCHELL & Co., commenced the manufacture of boots and shoes for the western and southern trade in 1864, as successors to Kimball & Robinson, who established the business in 1828. They occupy a four story building 191 x 40 feet, adjoining which is a three story building 70 x 30 feet. This firm employ 350 hands, consuming 40,000 lbs. of sole leather, 70,000 feet of wax and kip leather, and 7,000 pounds splits per month, making 1,000 pairs of shoes per day and about 200 cases of boots per week. Their machinery is driven by a 30 horse power engine, made by the Putnam Machine Company, of Fitchburg, supplied with steam from a flue boiler made by Goddard, Rice & Co., of Worcester, Mass.

H. M. TWITCHELL, established business in 1855. He occupies a building 36 x 48 feet, for the manufacture of boots and shoes; he employs 30 hands, produces 100 pairs per day, and does a business of $75,000 per annum.

GEORGE L. TWICHELL & Co., commenced business in 1867, manufacturing boot and shoe boxes. They occupy a building 40 x 80 feet, with yard room, &c., located above the depot, on the opposite side of the railroad track. They employ 20 hands and make boxes for many of the boot and shoe manufacturers in the vicinity. They derive their motive power from a 75 horse power engine, built at Fitchburg, Mass., by the Putnam Machine Co.

BROOKLINE, situated 3¾ miles from Boston and 33¾ from Woonsocket, a town of about 3,000 inhabitants and 6 churches, on the Woonsocket Division of the Boston, Hartford & Erie Railroad. The stations of Longwood and Chapel Station are between here and Boston, built for the accommodation of the people living in that part of the town.

Connected with Boston by the celebrated mill dam road across Charles River bay, one of the most beautiful and expensive avenues leading to the city. Here on a pleasant afternoon can be seen the wealth, youth and beauty of Boston driving their fast trotters and enjoying the bracing air of the country. The town of Brookline is remarkable for its varied surface, high state of cultivation, elegant country seats and gardens, excellent drives and for its rich and picturesque scenery. Many gentlemen of taste and fortune make it their residence.

BROOKSIDE, (formerly Adams Mills), a flag station, situated between Westford and West Chelmsford, one mile from each, a small village on the Stony Bank Railroad and Stonybrook river.

BUCKLAND, 73 miles from Fitchburg, and 13 from Hoosac Tunnel, a flag station in the town of Buckland, on the Vermont and Massachusetts Railroad. The town is separated from Claremont by Deerfield river, and is a very pleasant and good farming town, incorporated in 1779.

BURTTS, 8 miles from Lowell and 16 from Salem, a country station on the Salem & Lowell Railroad.

BYFIELD, 34½ miles from Boston, and 5½ from Newburyport, a village in the town of Newbury, on the Newburyport Railroad. This town was incorporated in 1635. The soil is of an excellent quality. The Indian name of the town was Quafeacunquen. In this town there are 3 churches and 9 schools, 300 scholars attending. The first spindles used in the United States were operated in this town. It was one of the first incorporated towns in this State, and the first mill here was built in 1635.

L. A. MORRISON occupies one-half of the Byfield factory, a two story wooden building, 32 x 90 feet, located one mile from the station, for the manufacture of woolen yarns. Commenced business in 1859, and employs 12 hands, runs 2 sets of woolen machinery, driven by a turbine water wheel, of 25 horse power. He consumes from 100 to 150 lbs. of wool, and turns out 100 lbs. of yarn per day; does business to the amount of $20,000 per annum.

H. M. HOWARD occupies one-half of the Byfield factory, a two story wooden building 32x90 feet, with a storehouse 28x45 feet, for the manufacture of woolen hosiery yarns. Commenced business in 1859, employs 8 hands and runs 2 sets of woolen machinery, driven by a turbine water wheel of 25 horse power. He consumes from 50 to 100 pounds of wool and turns out from 40 to 90 pounds of yarns per day, and does business amounting to $10,000 per annum.

BENJAMIN PEARSON occupies a two story wooden building 45x50 feet, and manufactures back board, stereoscopes, &c. He commenced business in 1860 and employs 6 hands. His machinery is driven by 2 turbine water wheels, 20 horse power, and does business amounting to $8,000 per annum.

J. O. ROGERS occupies a two story wooden building 70x 25 feet, located near the depot, for the manufacture of men's, boys' and youths' boots and shoes. He commenced business in 1863, employs from 25 to 30 hands and turns out 350 cases of boots and 75 cases of shoes per annum, doing business to the amount of $20,000.

LARKIN & MORRILL occupy a two story wooden building 60x20 feet, and manufactures snuff. He commenced busi-

ness in 1843, employs 2 hands and turns out 5 tons of snuff per year, doing business amounting to $6,000.

CAMBRIDGE, 3 miles from Boston, is one of the oldest towns in New England, having been settled in 1630. It comprises Old Cambridge, East Cambridge and Cambridgeport. Old Cambridge is the seat of the most ancient and best endowed college in the United States. Cambridgeport is about midway between Old Cambridge and Boston. East Cambridge is of new growth, and is situated on the Woburn Branch Railroad. Cambridge was incorporated by the name of Newtown, in 1630. In 1638, it took its present name. Harvard University, situated at Old Cambridge, was founded in 1638, and derived its name from the Rev. John Harvard, who bequeathed it a legacy of about £780. Its funds, at the present time, amount to $1,000,000. The first printing press in America was established here by Stephen Day, in 1639. The first work printed was the Freeman's Oath. Cambridge was made a city in 1846. It is pleasantly situated, although not so elevated as some of the adjacent towns. The streets are wide and well shaded, the houses are built back from the street and apart from each other, and are elegantly and tastefully arranged. Cambridge has 22 public schools, including the High School and City Almshouse school; five National banks and three Savings, and 27 churches. The valuation of real and personal property in 1868, was $34,093,800. There were 8,196 polls; poll tax, $2.

Cambridge Cemetery and Mount Auburn Cemetery are situated here, and are objects of interest. The former was established in 1853, the latter in 1831.

The manufacturing establishments in Old and North Cambridge are as follows:

That ancient seat of learning, the city of Cambridge, which can boast that within its borders was established the first printing press set up in the territory now comprised in the limits of the United States, can also point with pride to the magnitude of the printing establishments which have grown up here, and to the perfection which the art has attained in the hands of her industrious and skilful printers. The most recent evidence of this advance is the rebuilding and enlargement of the establishment of Messrs. H. O. Houghton & Co., known as the "Riverside Press," a name which it takes from its location near the banks of the winding and picturesque river Charles.

The original building in the Riverside group (and which now forms a part of the largest structure) was a plain, substantial brick edifice, 90 feet long and about 50 feet wide. In the progress of time, as the demands for increased space became urgent, wooden buildings were erected near or adjoining the original part, for the accommodation of special departments of the work. But these additional buildings, not having been located or erected in accordance with a general original plan, did not afford opportunity for that systematic course of work which is so important in the conduct of the printing business, and much inconvenience and loss of time was the result. Accordingly, Messrs. Houghton & Co., having purchased the buildings and estate, with about two acres of land, proceeded to rebuild nearly all their establishment and to thoroughly reorganize its several departments.

The new main building is of brick, four stories in height, including the French roof, and has a front of 100 feet and a depth of 70 feet. With the old brick building before mentioned forming the wing, the whole depth is 160 feet. The stories are of good height and are well lighted. The other new buildings comprise a boiler house, containing a thirty horse power engine, built by C. H. Brown, Fitchburg, for driving all the machinery of the establishment; a moulding and stereotyping room; a fireproof 60 feet long and 25 feet wide, for the deposit of stereotype plates; and a large warehouse—all of brick. Upward of fifty thousand dollars' worth of plates are constantly kept in the fireproof, properly packed and labelled, in readiness for use when the popular demand for the books which they represent shall require them to be again brought into service. Disconnected with these buildings are the horse sheds and coal sheds, the latter of sufficient capacity to receive coal by the cargo, as purchased by the firm, and brought up the Charles river to the doors of the establishment.

In erecting their new buildings, Messrs. Houghton & Co. took especial pains to secure immunity from fire, convenience of handling materials in the process of manufacture, and economical management.

Suffolk Chemical Co., established in 1866; capital, $150,000. John Schouler, president; M. S. May, treasurer. Occupy a two story wooden building, located in the rear of 266 Cambridge street, for the manufacture of standard household articles, such as flavoring extracts, bitters, perfumes, hair oils, &c. They employ 10 hands. Their office and salesroom is at No. 32 North Market street, Boston, Mass.

J. R. Pettingill occupies a three story wooden building, 45x35 feet situated on Brighton street, for the manufacture of ice tools. He commenced business in 1848, and has two employees. Runs an engine of four horse power, built by Allen & Endicott, furnished with steam from one of their upright tubular boilers of five horse power.

F. Fisher occupies a two story wooden building, 125x40 feet, located on Tannery street, for the manufacture of tan and curried leather. He commenced business in 1833, and employs 27 hands. The machinery used is driven by a steam engine of five horse power, supplied with steam power from a tubular boiler. He curries and finishes from 60 to 70 dozen skins per week.

Tyler, Howe & Co. occupy one room, 70x24 feet, in a three story wooden building; also, have a brick building, 35 x62 feet, and a store house 20x40 feet, located on State st., for the manufacture of spring beds. They commenced business in 1855, employ seven hands, and consume 150,000 feet of lumber, and 35 tons of wire per year. They also have a factory in Readsboro', Vt.

Henderson Brothers occupy a two story wooden building, 35x55 feet; also one 35x50 feet, situated on North avenue, for the manufacture of light carriages and sleighs. They commenced business in 1863, employ 15 hands, and turn out 25 carriages and 30 sleighs per year; doing business in buying, selling and making, amounting to $45,000.

Dalphon Osborn occupies a four story brick building, 62 x75 feet, located on State street, for the manufacture of doors, sash and blinds. He commenced business in 1842, and employs 50 hands. His machinery is driven by a steam engine of 30 horse power, built by Allen & Endicott, of this place, with one tubular boiler, built by Thos. Cunningham, of Charlestown.

William Muller occupies a three story wooden building, 125x35 feet with an ell 30x35 feet, and store house 50x30 feet, located on Tannery street, for the manufacture of tanned leather and calf skins. He commenced business in 1844, and employs 50 hands. His machinery is driven by an engine of 25 horse power, with two flue boilers built by Allen & Endicott. He tans, curries and finishes 1,500 skins per week, and consumes 400 cords of bark per year.

M. Kimbler occupies a wooden building 50x30 feet, located on North avenue, for the currying and finishing of leather. He commenced business in 1865 and employs 11 hands. He curries 50 doz. calf skins per week.

H. A. & O. SCRANTON,

WOOD TURNING, CIRCULAR, JIG AND BAND SAWING,

House Builders', Cabinet and Carriage Makers' Work.

Brackets, Posts, Balusters, Circular Mouldings, etc., etc.,

ON HAND AND MADE TO ORDER.

FACTORY, IN SMART'S BUILDING, NEAR OSBORN'S PLANING MILL,

MAIN STREET, CAMBRIDGEPORT.

D. C. SMART occupies a room 24x45 feet in a three story wooden building, located on State street, for the manufacture of rubber door stops, clothes dryers, and snow shovels. He commenced business in 1859 and employs 5 hands. His machinery is driven by an engine of 30 horse power with one flue boiler, built by Allen & Endicott of this place.

STEDMAN & KELLY occupy two rooms, one 20x40 feet and one 20x20 feet, in a 4 story brick building, located on State street, for the manufacture of piano forte actions. They commenced business in 1852 and employ 8 hands, consuming 8,000 feet of black walnut wood, and 100 buck skins per annum, and doing business amounting to $12,000.

CHARLES MYER & CO., occupy two floors in a four story brick building, one 70 x 84 feet, the other 20 x 30 feet, also have a dry house 25 x 20 feet, and lumber house 20 x 25 feet, located on State street, for the manufacture of oval frames, mouldings, &c. They commenced business in 1868; employ 20 hands, and turn out from 90,000 to 95,000 frames of different sizes per year. Power furnished from an engine in building adjacent.

RAWSON & HITTINGER, occupy a two story wooden building 60 x 125 feet, located on Main street, near West Boston Bridge, for the manufacture of portable and stationary steam engines. The business was commenced in 1865, and gives employment to 60 hands. The business was formerly carried on in Charlestown, under the name of Hittinger, Cook & Co. Their machinery is driven by an engine of twenty-five horse power, with one tubular boiler of forty horse power, built by themselves. They turn out one portable and twenty stationary engines per year. This firm also manufactures patent hydraulic presses of Hittinger & Rawson's patent, and do a business of $125,000 per annum.

L. D. MITCHELL occupies one floor of a 2 story wooden building 10x50 feet, located on Broadway, for the manufacture of cigar and tobacco boxes. He commenced business in 1859 and employs 5 hands, turning out from 5,000 to 6,000 boxes, and consuming 9,000 feet of Spanish cedar per month, doing business of $15,000 per annum.

ELLIOTT BARREL CO., established Jan. 1st, 1869. Capital, $8,000. Occupy a two-story building 60 x 40 feet, for the manufacture of various kinds of barrels, such as kerosene, beef, pork, fish, spirits, extracts, &c., or any kind required to be perfectly tight and secure from leaking. They can produce 100 barrels per day with their patent machinery, and employ 8 hands. Steam is used in running the machinery, about 6 horse power being required. The staves made are all perfectly finished when they pass through their machinery without the aid of any hand labor, and they are then ready to be set up and hooped into barrels, each of exact size. The machinery is adjustable to any size barrel, and entirely new and perfect in its operation, less complicated than any other machinery for the same purpose ever before introduced to the public. They manufacture the machinery themselves for the trade, and their prices are within the reach of the smallest manufacturer.

MASON, WHITING & CO. This firm formed a copartnership about two years since for the manufacture of lubricating oils. They have located here a large factory and storeshed, employing 8 persons. Their principal store and counting-room is at No. 102 North, corner Cross street, Boston. They also have an office in Providence, R. I., at No. 7 Leonard street.

KENDALL & ROBERTS occupy a building 40 x 75 feet, 2 stories, and boiler shop, 1 story, 175 x 50 feet, located on Main street, for the manufacture of steam boilers, rotary bleachers, iron bridges and roofs, and all kinds of plate iron work. Commenced business in 1860, and employ 60 hands. Their machinery is driven by an engine of 30 horse power, supplied with steam from a tubular boiler, 45 horse power, both of their own manufacture.

H. A. & O. SCRANTON occupy one floor of a three story wooden building 30x70 feet, located on Main street, for the manufacture of mouldings, balusters and general sawing and wood turning. They commenced business in 1867 and employ 6 hands. Their machinery, consisting of 4 wood turning lathes, circular and jig saws and a patent band saw, is driven by an engine of 35 horse power in building adjacent. They consume about $3,000 worth of lumber and do a business of $7,000 per annum.

GEORGE G. PAGE & CO. occupy a three story wooden building 80x80 feet, also a two story wooden building 25x 50 feet, located on Hampshire street, for the manufacture of all kinds of packing boxes. They commenced business in 1864 and employ 60 hands. Their machinery is driven by an engine of 60 horse power built by the Putnam Machine Co. of Fitchburg, Mass., with one tubular boiler built by Allen & Endicott of this place. They consume 3,000,000 feet of lumber and do a business of $100,000 per annum.

C. L. JONES & CO. occupy three wooden buildings, the first of which is two stories 50x200 feet; the second 1½ stories, 30x100 feet; and the third, one story, 30x30 feet. Also three brick buildings, as follows: one two stories, 40x70 ft.; one two stories 30x35 feet; and the other one story, 20x40 feet, located on Pearl street, for the manufacture of soap and candles. They employ 30 hands, and make 100,000 lbs. of soap and 25,000 lbs. of candles per week. There are 16 kettles in use in this establishment, whose combined capacity is 115 tons. Much of the labor of this business is done by steam power, supplied by two steam engines, one of 8, and

JOHN REARDON & SONS,

Manufacturers and Dealers in

SOAP, CANDLES AND TALLOW,

NO. 12 CENTRAL STREET, BOSTON.

Factory, - - - - - - - Pearl street, Cambridgeport.

Family and Shipping Soap constantly on hand.

the other of 10 horse power, built by Campbell, Whittier & Co., of Boston, with two tubular boilers, 50 horse power each, built by Allen & Endicott, of this place.

JOHN REARDON & SONS, manufacturers of soap, candles, and tallow; commenced business in 1865. They occupy a two story wooden building, 40x65 feet, located on Pearl st., where they employ eight hands, turning out about 800,000 lbs. of tallow, 340,000 lbs. of soap, and 148,000 lbs. of candles per annum; doing business of about $100,000. Office No. 12 Central st., Boston, Mass.

THE SHAWMUT IRON WORKS, incorporated June 1, 1866; capital $50,000. Office, No. 53 Broad street, Boston, Mass. The buildings occupied by this company are of wood, located on West Boston Bridge, and are as follows: A machine and pattern shop, 40x70 feet, two stories; a foundry, 100x120 feet, one story, and a store house, 40 x140 feet, with out buildings, sheds, &c., covering an area of 32,000 square feet. They employ from 50 to 60 hands, make 1,000 tons of castings per year, and do business amounting to about $60,000. Their motive power is supplied by an engine of 12 horse power, built by George W. Rawson & Co., of this place, with a tubular boiler of 12 horse power, built by Kendall & Roberts, also of this place.

FRANK A. KENNEDY, cracker manufacturer, No. 336 Main street, occupies a three story wooden building 50x120 feet with an ell 50x80 feet, where he employs 26 hands in the manufacture of all kinds of plain and fancy crackers and snaps, consuming 100 barrels of flour and turning out 20,000 pounds of crackers per week. The business of this firm amounts to about $150,000 per annum. There are used in packing 12,000 tin cans and about 15,000 barrels per year. Besides running 8 teams in New England, Mr. Kennedy sends his goods to all parts of the United States and to many foreign countries. In this establishment there are three large furnace ovens and one of McKenzie's patent real ovens. Most of the work is done by machinery which is driven by an engine of 6 horse power, built by Allen & Endicott of this place. The building is heated by steam.

THE METROPOLITAN FOUNDRY, Tobey & Co., proprietors, was established in 1867. They occupy a two story wooden building 55 x 60 feet, with an L 50 x 60 feet, located on Main street for the manufacture of all kinds of iron castings. They employ 30 hands and turn out about 1000 tons of castings per year, valued at $60,000.

HENRY THAYER & CO., occupy a four story brick building 50 x 50 feet, located on Main street, for the manufacture of pharmaceutical preparations, extracts, etc., and employ 15 hands. This firm commenced business in 1850. Their trade has increased to such an extent that they have concluded to erect for their own use a building three times the size and capacity of the one occupied by them at present. Their machinery is driven by an engine of 15 horse power supplied with steam from a tubular boiler 25 horse power, built by Allen & Endicott of this place.

J. J. WALWORTH & CO., manufacturers of all kinds of brass and iron castings, steam and gas pipe fittings, tools, &c., occupy a two story brick building, used as a machine shop, and a one story brick foundry building 45x280 feet, located on Main street. They employ 150 hands, and besides a large amount of other work, turn out about 1,500 tons of castings per year. The machinery, consisting of 3 upright drills, and 55 lathes in the machine shop, and all the necessary machines and apparatus used in a foundry is driven by an engine of 35 horse power with a tubular boiler of 40 horse power, built by Allen & Endicott of this place.

JOHN REMICK & SON, manufacturers of blank books, commenced business in 1867. They occupy one floor of a four story wooden building 40 x 70 feet, located on Main street, and employ 30 hands. Their machinery is driven by an engine of six horse power, with a tubular boiler of twelve horse power built by Allen & Endicott of this place.

JAMES FURFEY, occupies a 2½ story wooden building 20 x 60 feet, located on the corner of Brookline and Erie streets, for the manufacture of plain and fancy door mats. He commenced business in 1849. Employs 12 hands, and turns out about $18,000 worth per year.

LYMAN, KINSLEY & CO., manufacturers of wagon axles, car and engine axles, machinery, forgings, castings, &c. Commenced business in 1858. Their foundry building is 90x45 feet, 1 story; machine shop, 75x45, 3 stories; forge shop, 100x55 feet, 1 story, and rolling mill, 120x120 feet, 1 story, are located on Hampshire street, near Broadway. They employ 120 hands, and consume about 25 tons of iron per day. A 30 horse power engine, built by Allen & Endicott, and a 150 horse power engine, built by the Washington Iron Works, of Newburgh, New York, furnish the motive power for driving their machinery.

FROHOCK, KILBY & CO. occupy a room 60x28 feet, in a 2 story building, located in Kendall & Roberts' block, near West Boston bridge. This firm commenced business in 1866, manufacturing lasts of all kinds. They employ 5 hands, and do business of $8,000 per year.

J. M. MASTLING & CO., manufacturers of chamber furniture, commenced business January 1st, 1869. They occupy the upper floor of a 4 story brick building, 70x50 feet, located on State street. They have in their employ 20 hands, and produce about $25,000 worth of goods per annum. Their power is furnished from an engine in building adjacent. Office in Boston 13 Charletown street.

O. S. Bullock occupies a two story wooden building, 75 x30 feet, located at the junction of Broadway and Hampshire streets. He commenced the manufacture of cotton and woolen machinery in 1862, and employs 6 hands. The motive power is furnished from an engine of 15 horse power, built by Allen & Endicott, of this place, furpished with steam from a 15 horse tubular boiler, built by Kendall & Roberts, also of this place.

F. D. & L. H. Snow occupy a wooden building, 100x30 feet, located on Main street, for the manufacture of doors, sash, blinds and mouldings. Have 12 employees. Their machinery, consisting of 1 planer, 2 moulders, 2 circular saws and tables, 1 jig saw, 1 turning lathe, 1 tenoning and 1 mortising machine, is driven by an engine of 8 horse power, furnished with steam from a 10 horse tubular boiler, built by Allen & Endicott, of this place.

Henry M. Bird occupies a foundry 80x80 feet; also, a pattern house and ware room, 30x40 feet, two stories, wood, located near the junction of Broadway and Main street, for the manufacture Bird's patent flange pipes, and all kinds of iron castings. He commenced business in 1862; has 40 employees; turns out 50 tons of casting per month, and does a business of $60,000 per annum. The motive power is furnished from a 10 horse engine, built by Allen & Endicott, of this place, who also built the boiler in use by them, a tubular of 15 horse power.

Allen & Endicott commenced business in 1846; manufacturing steam engines, boilers, and machinery of all kinds. Their works are situated on Main street, and consist of a machine shop 280x40 feet, two stories brick, with out buildings, &c. They employ from 75 to 100 hands, and do a business of $150,000 per year. Their machinery is driven by an engine of 40 horse power, built by Otis Tufts, of Boston, furnished with steam from two tubular boilers, 8 horse power combined, built by themselves. Their office is at No. 5 Liberty street, Boston, Mass.

Theodore Downing, currier of slaughtered leather, commenced business in 1852. He occupies a 3 story brick building, 35 x 100 feet, situated at 278 Main street, and has 22 employees, and turns out 500 sides per week, doing business to the amount of $100,000 per annum.

Pettingill & Pear occupy a room 75x50 ft., in a wooden building, located on State street, and manufacture Howe's patent spring beds and cots. They commenced business in 1858, and employ 12 hands. Power furnished from engine in building adjacent. Their office and salesroom is at 35 Brattle street, Boston, Mass.

L. Kemp commenced business in 1840, on Davis street. They occupy a 2 story building, 40x50 ft., for the manufacture of family soap, and employ 3 hands, producing, on an average, 12,000 lbs. of soap per week.

James C. Davis commenced business in 1840, manufacturing all kinds of family soap. His works are situated on Broadway, near Davis street. He occupies a 3 story building, 100x80 feet, and employs 8 hands, producing 25,000 lbs. soap per week.

Braman, Shaw & Co., furniture manufacturers, commenced business in 1863. They occupy a four story wooden building 50x125 feet, located on Bridge street, where they employ 180 hands in the manufacture of parlor suits, reclining chairs and lounges, of which articles they turn out about $500,000 worth per annum. Their machinery, consisting of circular, jig and belt saws, planing machines, irregular moulders, morticing and tenoning machines, is driven by an engine of 30 horse power, built by Cook, Rymes & Co., of Charlestown, Mass., with a tubular boiler of 45 horse power built by Kendall & Roberts of Cambridgeport. Office and salesroom No. 27 Sudbury street, Boston.

Beal & Hooper, manufacturers of furniture, occupy a 6 story brick building 50x101 feet, and two 3 story wooden buildings 40x100 feet and 40x50 feet, respectively, located on Cambridge street, where they employ about 300 hands in the manufacture of parlor and chamber sets and walnut furniture. They consume over 1,000,000 feet of lumber, and turn out upwards of $300,000 worth of furniture per year. Their machinery, consisting of sawing, moulding, planing, tenoning and morticing machines, is driven by an engine of 100 horse power, with two tubular boilers of 120 horse power, built by Woodruff & Beach of Hartford, Conn. Office and salesrooms Nos. 3 and 5 Holmes' Block, Haymarket square, Boston, Mass.

Curtis Davis, commenced business in 1832, on Broadway. He occupies a three story building 100 x 40 feet, containing nine kettles, producing 35,000 pounds best family soap per week, and employing ten hands. The buildings are heated by steam from a tubular boiler made by Allen & Endicott of this place, which also furnishes steam for their kettles.

Cooper & Hurd commenced business in 1869, and manufacture various qualities of family soap. The business was established in 1849 by Wm. Cooper. Their works are situated on Fremont, near River street, and comprise a two story building 50 x 50 feet.

Sortwell's Distillery, Leon Goodall, proprietor, distiller of New England rum. The works are situated at the corner of Cambridge and Distill House street. The distillery is 120 x 60 feet, one story and built of brick, to which is attached the store room 45 x 60 feet, two stories. This house contains twenty-one cisterns, the capacity of which is 8,000 gallons each. The boiler and engine is also stationed in this building. An engine of eight horse power, made by Allen & Endicott, furnished with steam from three tubular boilers supplies the motive power. They consume 600 hhds. of molasses per year, and produce thirty-two gallons of rum each day, employing 15 hands.

Woodbury & Co. occupy a three story brick building 65 x65 feet and a three story wooden building 40x65 feet, located at the corner of First and Otis streets, for the manufacture of mouldings and picture frames. They commenced business in 1862 and employ about 25 hands, doing business to the amount of $75,000 per annum. Their machinery consists of sawing, planing and moulding machines, and is driven by an engine of 80 horse power, built by Woodruff & Beach, of Hartford, Conn., with a tubular boiler of 70 horse power, made by Campbell, Whittier & Co., of Boston, and a flue boiler of 50 horse power, built by McKay & Aldus, of East Boston.

Daniels, Harrison & Co. occupy a three story wooden building 35x100 feet, located at the corner of First and Otis streets, for the manufacture of chamber furniture and employ about 60 hands. Their machinery, consisting of sawing, planing, moulding and tenoning machines, is driven by an engine in an adjacent building. Office and salesrooms, No. 25 Sudbury street, Boston.

George Stevens occupies a three story wooden building 30x70 feet, located on Fifth street, for the manufacture of church organs. He commenced business in 1833 and gives employment to 8 hands, doing business to the amount of $20,000 per year.

F. Draper & Co. occupy a four story brick building, 36x 60 feet, located on Otis street, and manufacture brass, Britannia and stationers' hardware. They employ 40 hands and do business to the amount of about $75,000 per year. The business was established in 1833, by Francis Draper. An engine of 40 horse power, with a tubular boiler 40 horse power, drives their machinery.

WILLIAM L. LOCKHART,

UNDERTAKER,

Manufacturer, Wholesale and Retail Dealer in

COFFINS, CASKETS, ROBES, &c.

Coffins and Caskets made to order at the shortest notice.

Bridge St., Corner of Third, - - - - - - - EAST CAMBRIDGE.

Daniels Brothers & Co. occupy a three story wooden building 100x35 feet, and wharf for storage, 300 x 300 feet. Also, 10 rooms, each 50x70 feet, for office and salesroom, located at 25 Sudbury street, Boston. They manufacture dining room and chamber furniture of every description. The business was established in 1842, and now gives employment to 100 hands, and consume 1,000,000 feet of lumber per year. Their power is furnished from an 80 horse engine in a building adjacent. They do a cash business amounting to $325,000 per annum.

A. K. Lissberger occupies a 3 story brick building, 50x 40 feet, for the manufacture of lead and block tin pipe and tinmen's and plumbers' solder. He commenced business in June, 1868; has 12 employees, and turns out 60,000 lbs. of pipe and 5,000 lbs. of solder per week. Their office and salesroom is located at Nos. 145 and 147 North street, Boston, Mass.

Burtons, Fellows & Co. This firm commenced business in 1844, and manufacture brushes of every description. They occupy a 3 story building, 75x40 feet, situated on Gore st., and employ from 75 to 100 hands. Their machinery is driven by an engine of 10 horse power. Their office in Boston is at 21 Exchange street.

The abattoir of John P. Squire & Co. of East Cambridge. This branch of industry was established by John P. Squire in 1843, in Boston, and after continuing for several years with great success he started this establishment as a branch to the Boston house in 1854. John P. Squire & Co. have now a building of 700 feet on Gore street, running back 80 feet, 2 stories and divided into several departments, for the making of sausages, lard and the manufacturing of lard oil, of the latter branch of business they turn out 250,000 gallons per year. In the rear of their main building their abattoir or slaughter house is situated, also their curing and smoking houses and pens that will hold 3,000 hogs. The slaughter house has been well arranged and every facility has been furnished for the dressing of hogs. Last year, 1868, they handled 125,000 hogs, 80,000 of which were shipped there alive, the others were dressed and forwarded from the West. In the winter they average 2 1-2 tons sausages per day. They give employment to 150 hands 20 being engaged in making barrels and tubs for the lard, oil and pork, turning out 100 barrels per day. They lay in about 2,000 tons of ice, a part of their main building being devoted to this purpose. Their motive power is furnished from a 15 horse engine made by Louis Osborn of East Boston, furnished with steam from 2 tubular boilers made by Allen & Endicott. These boilers also furnish steam to heat the buildings, and for other purposes.

Wm. L. Lockhart commenced the manufacture of coffins, caskets and shrouds in 1853. In 1865 J. C. Seelye became a member of the firm under the name of Lockhart & Seelye, and continued until his death in 1868; since that time, Mr. L. has continued the business alone, occupying buildings situated on the corner of Bridge and Third streets, near the head of Gore street.

He employs 32 hands and runs one planer, six circular saws and tables, two moulding machines, one jig saw, one boring machine, and a matching machine. His machinery is driven by an engine of 12 horse power, built by Campbell, Whittier & Co., of Boston, who also made his tubular boiler, used in heating the buildings and supplying the steam for the engine.

Mr. Lockhart consumes annually 450,000 feet of walnut, white wood and pine, 600 yards merino, and about $1,500 worth plated ware, producing 175 caskets and coffins per week.

Samuel S. Hamill, manufacturer of church organs, 91 Gore street. The business was established in 1862. He occupies two 3 story buildings 60x30 and 40x40 feet respectively. Employs 22 hands and produces on an average 25 instruments per annum, valued at $2,000 each, doing a business of $50,000.

Pettingell & Sawyer commenced business in 1861. They manufacture oil clothing and hats for fishermen. The business was established in 1849 by B. D. Moody. Their works are situated at the corner of Second and Thorndike streets, giving employment to 10 men and 75 females, producing 30 doz. hats and 100 suits of clothing per day.

John A. Ellis & Co. commenced business on Gore street in 1862. They manufacture furniture, occupying 4 buildings, and employ 100 hands. They consume about 200,000 feet of lumber yearly, producing first class goods. The motive power is furnished from a 50 horse power engine made by the Corliss Steam Engine Co. of Providence, R. I. The buildings are heated by steam from two tubular boilers made by Kendall & Roberts. These boilers also furnish steam for the engine.

Joel Robinson commenced business in 1848, and manufactures iron fence railings, bolts, &c. He occupies the first floor of building situated at No. 10 Gore street, and employs 7 hands, doing business of about $15,000 per year.

Burton Brewery, J. M. Moore & Co., proprietors, commenced business in 1868, for brewing ale. They occupy a two story brick building 50x50 feet, situated on Fifth street, and employ 4 hands. The capacity of these works is about 300 barrels per week. The motive power is furnished from a 9 horse engine, furnished with steam from a tubular boiler.

BAY STATE GLASS CO. Incorporated in 1851; capital, $150,000. Thomas Dana, President; Samuel Slocum, Treasurer; E. W. Bettinson, Agent. This company manufacture all kinds of flint table ware, colored ware, &c. Also ware for jewelers, apothecaries, &c. Their works are situated on Bridge street, and cover about three acres of ground. They employ 150 hands. The capacity of this company is, from two 10-pot furnaces, 23 tons per week. Their motive power is furnished from a 12 horse engine, built by Otis Tufts of Boston; steam from a flue boiler, maker unknown.

THOMAS S. HUDSON commenced manufacturing ink stands, brackets, &c., on Gore street, in 1857, where he continued until 1862, when he removed to No. 64 Fifth street, occupying 4 story building, 45x47 feet, filled with machinery for making the different parts of ink-stands, brackets, hand-stamps, and large stamps, for banks, railroads, &c. The latter branch of business he commenced since 1863. His patent ribbon hand-stamp that changes its own date, is one of the best cancelling stamps that has been put into market. He employs 33 hands. His machinery is driven by a 7 horse power engine, built by McKay & Aldus, furnished with steam from a tubular boiler, built by Campbell, Whittier & Co., of Boston.

F. GELDOWSKY commenced business in East Cambridge in 1862, occupying two buildings situated on Otis street. His workshop is a three story frame building 150x20 feet, used for making tables and chamber suits; opposite is a three story building 100x20 feet, used as a warehouse. Mr. G. manufactures first-class furniture, the cost of labor being far greater than the stock. He employs 160 hands and does a business of $250,000 per year.

NEW ENGLAND GLASS CO. This company was incorporated in 1818, with a capital of $500,000. They manufacture flint glass, table ware, &c. The officers of the company are James Ellerson, President; A. L. Hall, Treasurer, and Henry Whitney, Agent. Their works are situated on North street, and cover 4 acres of ground. The buildings are built of brick and from one to four stories high. They employ 450 hands and have in use 4 furnaces. The buildings are heated by steam from 3 flue and 4 cylinder boilers, which also furnish steam for a 100 horse Corliss engine and a 15 horse Tufts engine, both of which are used in driving the machinery belonging to this establishment.

H. D. GILMAN & Co. commenced business in 1866, as manufacturers of centre and extension tables. Their office and salesroom are at 149 Fulton street, Boston. Their works are situated on First near Cambridge street, where they employ 25 hands and turn out on an average 125 centre and 50 extension tables per week. Their machinery is driven by a 30 horse power engine, made by Bird & Co., of East Boston, furnished with steam from a tubular boiler made by John Davis, Jr., of Boston.

CAMPBELL'S, situated 21¾ miles from Boston, and 48¼ from Southbridge on the Boston, Hartford and Erie Railroad. This station is for the accommodation of Mr. George Campbell, paper manufacturer, whose mill is situated on the left of the depot under the hill, and employs about twelve persons. The number of inhabitants in this village is about forty.

CAMPELLO, 2½ miles from Boston, and 45¾ from Newport, on the Old Colony & Newport Railroad. The name of Campello was suggested by Rev. D. Huntington to the citizens of Plain Village, at the time of the establishment of the Post Office, in February, 1850, on account of the name Plain Village being often confounded with other places spelled nearly the same. It was unanimously adopted by the people as a proper one, it signifying a small plain. Population, 1,500. Number of churches, 1.

A. B. MARSTON & Co. commenced the manufacture of organs and melodeons, in July, 1868. The business was established in 1841. They have recently erected a new building, 28x30 feet, 2 stories, in addition to their former one, which is 26x36 feet, 2 stories. They employ 6 persons and turn out one instrument per week on an average.

J. H. WALKER employs 10 persons for the manufacture of men's shoes, in a building 24 x 36 feet, 2 stories, producing 48 pairs per day, and doing a business of $25,000 per year.

G. J. KINGMAN occupies 2 floors of a building 24x60 feet, for the manufacture of men's boots and shoes, commencing in 1863. He employs 25 persons, produces 150 pairs per day and does business to the amount of $50,000 per year.

A. P. COVANT & Co. commenced the manufacture of men's shoes in 1865. Their building is 28x60 feet, 2 stories, wood. They employ 21 persons in their factory, besides other persons outside. For 3 years previous to Dec. 5th, 1868, they produced 4,311 cases, their pay roll amounting to $30,000 per year.

WM. SNELL commenced the manufacturing of brogans in in 1852. His building is 30x23 feet, 2 stories, with another 22x24 feet, 2 stories. He employs 16 persons.

HORACE BRYANT commenced the manufacturing of men's shoes in 1855, the building is 22x30 feet, 2 stories. He employs 20 persons, produces 100 pairs per day, the business amounting to $50,000 per year.

JOHN O. EMERSON commenced the manufacturing of men's shoes, congress boots, &c., in 1866, as successor to Emerson & Keith, who established the business in 1864. The building is 24x51 feet, 2 stories. He employs 25 persons; produces 100 pairs per day, the business amounting to $50,000 per annum.

H. W. REYNOLDS commenced the manufacturing of men's shoes in 1864. His building is 80x22 feet, 2 stories. He employs 30 persons; produces 1,000 cases per year and does a business of $100,000.

WILLARD KEITH, manufacturer of men's shoes, occupies a building 24 x 55 feet, two stories. He employs 12 persons; produces 2,500 pairs per month, and does a business of $35,000.

L. W. PETERSON, employs sixteen persons for the manufacturing of men's shoes, producing seventy-five pairs per day. His building is 40 x 26 feet, two stories. His business amounts to $40,000 per year.

GEO. STEVENS, commenced the manufacture of men's shoes in 1857. His building is 24 x 64 feet, 3 stories. He employs 40 persons, producing 250 pairs per day, and doing a business of $100,000 per annum. A seven horse-power engine made by Gifford & Houghton supplies the power.

A. & A. B. KEITH & Co., occupy a building 30 x 65 feet, three stories, with an L 23 x 45 feet, three stories, for the manufacture of men's shoes. The business was established in 1850. They employ 200 persons; produce 800 pairs per day, and do a business amounting to $300,000 per year. This firm have another manufactory at Northbridge, Mass. on the P. & W. R. R.

CANTON, (see also South Canton) 14 miles from Boston, 29½ from Providence, on the Boston & Providence railroad and Stoughton Branch. A village in a township by the same name. It contains 5

churches and is a thriving manufacturing village of much importance.

The large and well known stove polish manufactory of Messrs. Morse Brothers, of which Elijah A. Morse is sole proprietor, is situated here. This business was established here in 1861 on a small scale and the gigantic proportion their business has attained is owing to the energy and perseverance of the proprietor and the great worth and merit of the article manufactured, known as the "Rising Sun Stove Polish." It is estimated that one-half of all the stove polish furnished the United States and Canadas is manufactured here, the same being sold to over 20,000 merchants. Mr. Morse employs on an average 10 hands and occupies 1 building used for manufacturing purposes only 130 feet in length. Power is furnished by a steam engine manufactured by H. C. Hoadley of Lawrence, Mass., 16 horse power. The grinding mill in which plumbago is pulverised makes 1,200 revolutions per minute. The salesman of this house has travelled very extensively and introduced this article in all cities, towns and villages in twenty-one different States.

CARLTONVILLE, 23 miles from Lowell and 1 from Salem, a country station on the Salem & Lowell Railroad.

CARYSVILLE, 28 miles from Boston, 9 from Woonsocket and 25 from Providence, on the Woonsocket division of the Boston, Hartford & Erie Railroad. Population, about 225.

CARYVILLE MILL, formerly run by F. B. Ray, but now by C. H. Cutler & Co., for the manufacture of satinets, commenced business in 1868. The mill has 4 sets woolen cards with 40 looms. The building is 45x80, four stories, with picker house attached 30x40, one story. The building situated opposite the mill is used as a finishing room, sorting room and dye house and is 30x60 feet, two stories. They also have an office building and storehouse 70x25 feet, one story. They employ 80 hands and turn out about 30,000 yards ¾ goods per month, consuming 10,000 pounds of wool and 30,000 pounds of cotton. Motive power furnished by a 70 horse breast wheel 20x20.

METCALF & ROCKWOOD commenced business in 1863, making cloth and boot boxes, in a building situated on the river, 25x50 feet, two stories, employing 4 hands and turning out 90 cases per day. Their motive power is furnished by a 24 inch turbine wheel of 10 horse power, also a 12 horse power engine, made by Otis Tufts, of Boston, with 2 flue boilers. Their saw mills, which they run only in the winter months, are 50x40 feet, one story. This building contains the up and down saw, the circular saw being in a building 30x40 feet, one story. They usually saw about 500,000 feet of lumber during the season. Their motive power for the saw mill is supplied by 2 turbine wheels of 25 horse power combined.

WILLIAM FAIRBANKS commenced business in 1864, manufacturing boots for the Western trade, in a building situated near the depot, 95x25 feet, three stories, employing 80 hands. He makes about 4,500 cases per year, using 108,000 pounds sole leather, 300,000 feet upper leather, 140 bushels pegs and 6,800 pounds nails. He also makes boots for the mining districts. The business was established in 1848 by E. & W. Fairbanks.

CENTRAL, 6 miles from Boston. A country station on the Dedham Branch, in the town of West Roxbury.

CHAPEL. A small station on the Brookline Branch of the Boston and Albany Railroad, about one mile from Boston.

CHARLEMONT, 78 miles from Fitchburg, and 158 from Boston, a station and town on the Vermont & Massachusetts Railroad. Deerfield river meanders through the town. Although this is a mountainous township, it contains much valuable land.

CHARLES RIVER VILLAGE, 14½ miles from Boston, and 23 from Woonsocket, a flag station, containing about 100 inhabitants situated on the Charles river and the Woonsocket Division of the Boston, Hartford and Erie Railroad.

CHARLESTOWN, 1 mile from Boston, on the Boston & Maine Railroad, adjoining the city, and forming a part of the port of Boston. The city is situated on a peninsular and is connected with Boston by two bridges. The peninsula extends from Somerville, 1¼ miles in a southeasterly direction. The Indian name of this city was Mishawun, and it was first settled in 1628, and incorporated as a town in 1629. This city is noted for its sacrifices in the cause of liberty, and its soil will ever be dear to the patriot's bosom. The streets do not run as regularly as those in Philadelphia, but partake more of the style of the streets in Boston, with the exception that they are wide and airy and have many elegant public and private edifices. The surface is uneven, and near the centre rises into two prominences, called Bunker's and Breed's Hills, the summits and slopes of which afford delightful sites for dwellings. There are many objects of interest in Charlestown. The first of which is Bunker Hill Monument, erected in commemoration of the first battle fought between the British and Americans. It stands on Breed's Hill, usually called Bunker Hill, near where brave General Warren fell. Its foundation is 50 feet above the level of the sea. The corner stone was laid by the Marquis LaFayette, June 17th, 1825, the 50th anniversary of the battle. June 17th, 1843, the completion of the monument was celebrated in the presence of the President of the United States, members of his cabinet, and a vast concourse of citizens. It consists of a plain shaft of granite 220 feet high. The view from the top is magnificent.

The United States Navy Yard was established about 1798. It is situated on the North side of Charles river, on a plat of ground containing about 75 acres, enclosed by a high wall of durable masonry.

The Charlestown State Prison is also located here.

Charlestown was incorporated a city in 1847. In 1864, water was supplied from Mystic lake, situated 5 miles from the city, in Medford, which has given great impetus to manufactures.

PEIRCE, BROWN & CO. occupy a three story wooden building 100x60 feet, located on Medford street, where they manufacture every variety of furniture. Their machinery, consisting of planing and moulding machines, lathes, saws, &c., is driven by an engine of 20 horse power, in building adjacent. This firm also occupy as an office and salesroom, a six story brick building 120x60 feet, situated at the corner of North and Richmond streets, Boston. The business was established in 1842 by Foster Peirce, Joseph Peirce and Nathaniel Brown, under the firm name of F. & J. Peirce & Co. In 1865, the firm was changed to Peirce, Brown & Co., un-

GERRISH & O'BRIEN,

Manufacturers of every description of

Oval and Grecian Parlor Suits,

SOFAS, TETE-A-TETES, DIVANS, LOUNGES, ROCKING, PARLOR AND EASY CHAIRS.

Corner Chamber and Water Streets, - - - CHARLESTOWN, MASS.

HENRY GERRISH, HENRY J. O'BRIEN.

der which head the business has since been carried on. The firm have 125 employees, and do business amounting to $300,000 per annum. [See advertisement, p. 200.]

H. S. DOANE & Co. occupy two rooms 65x55 feet, located at the Charlestown State Prison, for the manufacture of brushes of every description. Commenced business in 1827. Have from 40 to 60 hands. This firm also occupy a 2 story wooden building, located on Chapman street, where they employ, when in full operation, 30 hands. They consume about $30,000 worth of bristles per annum, and do business to the amount of $75,000. Office and salesroom, No. 80 Water street, Boston.

F. M. HOLMES & Co., manufacturers of upholstered furniture, walnut chamber sets, &c., occupy a six story brick building, 220x50 feet; a brick store house 100x30 feet, two stories high; an engine house, dry house, &c., 70x40 feet, three stories, also brick, located at No. 121 Medford street. They also occupy as an office and salesroom, five floors of a six story brick building located at Nos. 188 and 190 Hanover street, Boston. They commenced business in 1847; have 300 employees, and consume annually about 1,200,000 feet of lumber. Their machinery is driven by an engine of 80 horse power, Babcock & Wilcox's patent, supplied with steam from two tubular boilers of 100 horse power combined, built by the Atlantic Works, of East Boston, Mass. This firm do business of about $600,000 per annum.

J. PORTER & Co. occupy 15,000 square feet of room, located on Alford street, for the manufacture of varnishes and japans for coaches, cars, carriages, pianofortes and furniture. This firm are also dealers in kerosene and lubricating oils, benzine, camphene and alcohol; and were formerly engaged in the manufacture of Porter's patent burning fluid. Office and salesroom, 101 Water street, Boston.

POWERS & EDMUNDS occupy a two story wooden building 36x84 feet, with an ell 35x35 feet, located at No. 345 Medford street, for the manufacture of stone ware. They commenced business in July, 1866; have 20 employees, and do business to the amount of $50,000 per annum.

WM. LITCHFIELD occupies 1 floor 40x50 feet of a 2 story wooden building, located at the corner of Front and Second streets. For the manufacture of brass castings of all descriptions. He commenced business in 1864, and employs 5 persons.

CHARLESTOWN DRAIN PIPE WORKS, Edmands & Co., Proprietors, occupy a 2 story brick building 120x50 feet, a clay house 30x60 feet, also 59,000 square feet of wharf room with a store room on wharf 40x100 feet, located at No. 41 Medford street, for the manufacture of drain and water pipes. They commenced business in 1812, and employ 25 hands. This firm have a hydraulic engine built by Cook, Rymes & Co. of this city. They also have in use three kilns for burning pipe, and consume 600 cords of wood, 600 tons of coal and 2,000 tons of clay per year, producing 1200 feet of pipe per day, varying in size from 5 to 12 inches, and do a business of $70,000 per year.

GERRISH & O'BRIEN, occupy a three story wooden building 150x60 feet, located at the corner of Chamber and Water streets, for the manufacture of chairs, sofa and lounges. They commenced business in June 1865, and employ 23 persons. This firm have in use 2 moulders, 2 circular saws, 2 jig saws, 1 Gray & Wood's planer, 1 turning lathe, 1 swing saw, 1 boring machine, and other machinery adapted to the business, their power being furnished from an engine in an adjacent building.

CODDING & OSGOOD occupy a 2 story wooden building 40x80 feet, with an ell 12x20 feet, located on Sherman street, on a line with the Boston and Maine and Eastern Railroad, for the manufacture of engine, building and mill-work, and for doing all kinds of jobbing, employing 14 hands. They commenced business in NOV. 1856. Their machinery is driven by a steam engine of 12 horse power, built by Cook, Rymes, & Co. of this city. They do business amounting to $15,000 per year.

HADLEY & WRIGHT occupy a 2½ story wooden building 28x36 feet, located at No. 3 Sixth street, for the manufacture of milk cans. He commenced business in 1860, and employs 8 hands.

DAVIDSON RUBBER CO. occupy a 3 story brick building 60x125 feet, with two ells 60x60 feet, situated on Brookline street, where they employ 300 persons in the manufacture of Davidson's patent syringe and druggists rubber goods generally. They commenced business in 1863. Their machinery is driven by an engine of 125 horse power built by the Atlantic Works of East Boston, supplied with steam from 2 boilers built by Thomas Cunningham of this city.

ASHBEL WAITT occupies a 3 story wooden building covering about 12,000 square feet of land, located at the corner of Arrow and Front streets, for the manufacture of morocco, goat and sheep skins. He commenced business in 1832; employs 25 hands, and turns out 2,000 skins per week. Office, 71 Kilby street, Boston, Mass.

J. F. & F. L. GILMORE occupy 6,000 square feet of room, located at from 49 to 59 Medford street, as manufacturers of, and dealers in all kinds of rough and hammered granite for buildings, cemeteries, monuments, &c. This firm commenced business in 1852. Have 60 employees, and do business to the amount of $100,000 per annum. Office No. 22 State street, Boston, Mass.

M. Guiness occupies a 4 story wooden building, located at No. 6 Hamilton court, for the carrying of leather for boots and shoes. He commenced business in September, 1865, and employs 6 hands. His machinery consists of stuffing, glassing and splitting machines.

Wemyss Bros. occupy 2 floors of a wooden building, 60x 40 feet, located on Medford street, where they manufacture a variety of chamber furniture, glass frames, hat trees, and sewing machine cabinets. They commenced business in March, 1867, and employ 17 hands, doing business of from $17,000 to $18,000 per annum.

W. P. Hayward & Co. occupy a three story wooden building, 40x60 feet, located on Medford street, for planing, moulding, sawing and turning; and for the manufacture of brackets, stair posts, rails, and balusters. They commenced business in 1868, and employ 12 hands. They run a 20 horse power steam engine, built at the Burdon Iron Works, of New York City, supplied with steam from a tubular boiler, built by McKay & Aldus, of East Boston, Mass.

Elbridge Parker occupies a 3 story brick building, 50 feet square, located at the corner of Water street and Warren avenue, for the manufacture of pine chamber sets. He commenced business in 1862, employs 15 hands, and produces 1,400 sets per annum, and does business to the amount of $30,000.

Frederick Waterman occupies a 2 story wooden building, 50x60 feet; also a storeroom 50 x 55 feet, located on Medford street, and manufactures doors, window frames, and sash. He commenced business in 1865, and employs 15 hands, consuming about $15,000 worth of lumber per year.

S. Brown, Agent, occupies a two story wooden building 33x96 feet, located at No. 337 Medford street, and manufactures chamber sets. He commenced business in 1865 and has 8 employees.

A. Waterman occupies a wooden building 70x80 feet, located at 527 Medford street, as a sawing and planing mill. He commenced business in 1843 and employs 10 hands. An engine of 60 horse power drives his machinery.

Cook, Rymes & Co. occupy a 4 story brick and stone building 60x80 feet, also a large forge and boiler room 75x 80 feet, located on Water street, where they manufacture stationary and portable steam engines and other machinery. They also manufacture Rymes patent retainers, and hydraulic presses used for manufacturing tobacco and for other purposes. They commenced business in 1841 and employ 100 hands. Their machinery is driven by an engine of 40 horse power, supplied with steam from two flue boilers of 80 horse power each, all of their own manufacture. They do business of from $75,000 to $100,000 per annum.

George Lane occupies a 2 story wood building 38x40 feet, located at 296 Main street, for the currying of calf skins. He commenced business in 1826, and employs 5 hands. This firm curry 20 dozen calf skins per week. Their machinery is driven by a steam engine of 4 horse power and one tubular boiler 6 feet long 2½ feet in diameter of 4 horse power, built by Thomas Cunningham of this city, does business amounting to $30,000 per annum.

Ezra Trull & Co. occupy a 3 story brick building 150x60 feet, located at No. 72 Water street, for the manufacture of New England rum. They commenced business in 1858, and employ 12 hands. They use one still capable of turning out 1,500 gallons per day. Their office is at No. 45 North Market street, Boston, Mass.

John P. Robinson & Co. occupy 10,000 square feet of room in a 3 story wooden building with basement, located on Chapman street, for the manufacture of furniture. They commenced business in February, 1868, and employ 25 hands. Their machinery consisting of 2 jig and 5 table saws, 1 irregular moulding, and tenoning machine, lathes, &c., is driven by an engine in an adjacent building.

Rand and Byam occupy a 2 story wooden building 40x25 feet with an ell 60x25 feet, located at No. 9 Charles street, for the manufacture of soft and hard soap. They commenced business in 1856, employ 1 hands, and turns out 200,000 lbs. of hard soap per annum.

Morey & Robinson occupy a two story wooden building 36x40 feet, located at No. 508 Main street, and manufacture carriages of every description. They commenced business in April, 1865, employ 2 hands, and do business amounting to $3,000 per annum.

John Kent, occupies a three story building 200x50 feet and a malt house 90x50 feet, used in the manufacture of ale. He commenced business in 1830, and employ 20 hands. This firm consumed 35,000 bushels of hops per year, and turn out 15,000 barrels of ale. An engine of 15 horse power supplied with steam from 2 boilers, 75 horse power, built by Kendall & Roberts of Cambridgeport, Mass., supplies the power.

Stickney & Poor occupy a 4 story brick building, 70x 116 feet; engine and boiler house, 30 x 60 feet, and three 2 story wooden buildings used as storehouses, 80x28 feet, 50 x25 feet and 30x75 feet respectively, located on Cambridge street, where they manufacture mustard, coffee, spices, &c. They commenced business in 1849, and have 35 employees. Their machinery — that of the most improved kinds—is driven by an engine of 70 horse power, built by Bird & Co., of East Boston, Mass. Their salesroom is at Nos. 19 and 20 India street, Boston.

Drew, Jackson & Co. occupy the second floor of a wooden building, 100x120 feet; also a 2 story building used for varnishing, 150x50 feet, and drying room 18x40 feet, located on Medford street, for the manufacture of black walnut, chestnut and ash dining, centre and extension tables. Employ 55 hands. They commenced business in 1868, and turn out 120 extension tables, 8 dozen common tables and 12 pillar extension tables per week. Power furnished from building adjacent. They do business to the amount of $100-000 per annum. Office 173 Blackstone street, Boston, Mass.

Thomas F. Hunnewell occupies a 2 story wooden building, 50x25 feet, located at No. 6 Chambers street, for the manufacture of carts, wagons, &c. He commenced business in 1843, and employs 5 hands.

Tucker Manufacturing Co. occupy 14 rooms, located at the Charlestown State Prison, where they have employed about 100 men, in the manufacture of brouzed iron goods, and the Tucker patent spring bed. The business was established by Mr. Hiram Tucker about 14 years since, and was incorporated as a company in January, 1866, with a capital of $450,000. They have a variety of machinery for iron work valued at $75,000, consisting of screw machines, lathes, planers, &c., which are driven by an engine of 40 horse power, built by Allen & Endicott, of Cambridge, Mass. This company were awarded a silver medal for goods displayed by them at the Paris Exposition in 1867; also a gold medal from the American Institute, at New York, in 1867; and a silver medal from the Massachusetts Mechanics Charitable Association in 1865. Amount of business done exceeds $500,000 per annum.

George W. Berry & Co. occupy a 4 story wooden building, 80 x 35 feet, located at No. 427 Medford street, and manufacture chamber furniture. They commenced business in 1861, employ 100 hands, and consume 1,000,000 feet of lumber annually. Their machinery consists of 3 jig saws, 1 splitting saw, 2 ripping saws, 1 swing cutting cutting-off saw and 1 squaring saw; 3 turning lathes, 2 irregular moulders, 1 jointing, 1 tenoning, 1 grooving and 1 boring machine,

A. WHITE & Co.,

Manufacturers of

Walnut, Cane-seat, Cottage, and Dining Chairs;

Also, ARM CHAIRS of various kinds.

Marginal St., CHELSEA, MASS. BOSTON OFFICE, 96 FULTON STREET.

A. WHITE, H. K. WHITE.

which are run by a 60 horse power engine, in an adjacent building. Their office and salesroom is at Nos. 1 and 2 Haymarket square, Boston.

CHARLTON, 143 miles from Albany, 57 from Boston and 54 from Providence, a village of about 150 inhabitants, in a town by the same name on the Boston and Albany Railroad. Charlton was set off from Oxford in 1754.

E. S. SOUTHWICK commenced the manufacture of women's pegged shoes in 1865. He occupies a 2 story building opposite the depot 30x60, employing 20 persons and producing 200 cases per year.

C. E. MORSE & Co., manufacturers of men's, boys' and youths' thick and kip boots, men's and boys' brogans, women's, misses and children's balmorals and lace boots. They occupy a 3 story building 30x60 feet, situated about 2 miles from the depot. They employ 40 males and about 15 females. Labor saving machines run by steam power are used in the cutting of sole leather, rolling and splitting, pegging, stitching, &c. Their annual production is about 1,200 to 1,500 cases of boots and shoes; their sales amounting from $75,000 to $80,000.

CHASE'S, 5 miles from Middleboro', 5½ from Taunton. A country station on the Middleboro' and Taunton Railroad.

CHELSEA, 4 miles from Boston, and 32 from Newburyport; located on the Eastern Railroad. This city was formerly a ward of Boston; incorporated in 1738. Settled in 1630; a city in 1857. It contains ten churches, viz.: 2 Baptist, 1 Unitarian, 2 Methodist, 2 Congregational, 1 Episcopalian, 1 Universalist, and 1 Catholic.

A. WHITE & Co. occupy a three story brick building, 65x35 feet, located on Marginal street, as a planing mill and for the manufacture of walnut cane seat chairs. The business was commenced in 1840, and gives employment to 50 persons, who turn out about 800 chairs per month. Their machinery is driven by an engine of 35 horse power, built by Hawes & Hersey, of South Boston, Mass., supplied with steam from a tubular boiler 35 horse power, built by Kendall & Davis, of Cambridgeport, Mass. This firm do business to the amount of $30,000 per annum. Their office and salesroom is located at 96 Fulton street, Boston, Mass.

CHELSEA WOOLEN MILL, established in 1863, occupies a 3½ story building with basement, 40x160 feet, situated on William street, for the manufacture of repellants. This mill contains three sets of woolen machinery and 1,660 spindles. They employ 75 hands, and turn out 3,100 yards of cloth per week. From a 40 horse power engine, built by Campbell, Whittier & Co., of Boston, they derive their motive power.

THE AMERICAN HEEL STIFFENING CO. is a comparatively new concern, having been established in 1868. They occupy the works built by J. Tetlow for the building of iron clads, which include a main building 220x65 feet and several smaller structures. A steam engine of 15 horse power drives the machinery. The heel stiffening made by this company, is made of materials possessing non-conducting properties, and is formed in a mould under heat and pressure. It is made to conform to any last, thus giving a uniform shape to the shoe to which it is attached. The principal advantages claimed for this stiffening—and they are very important ones—are that it is unaffected by moisture and always retains its shape. The company have spent a large amount of money in preparing machinery, &c., and are now turning out 15,000 pairs of stiffenings per day. J. R. Moffitt is general superintendent of the works.

D. C. DANS, occupies 10,000 square feet of wharfage room, situated on Marginal, opposite foot of Shurtleff street, for the manufacture of hammered granite for building cemetery and monumental work. He commenced business in May, 1867, employs 12 hands, and does business amounting to $12,000 per annum.

CHELSEA IRON FOUNDRY, Bisbee, Endicott & Co., Proprietors, occupy a foundry 80x120 feet, a machine shop 40x80 feet and blacksmiths' shop 20x40 feet, also various other out-buildings used as storehouses, &c., located at the foot of Pearl street. This firm commenced business in 1835, and manufacture iron castings and machinery. They employ 60 hands and consume 65 tons of iron per month. A 20 horse power engine of their own manufacture, supplied with steam from a flue boiler built by Allen & Endicott of Cambridgeport, Mass., drive their machinery.

THE CHELSEA OIL CO. commenced business in 1848, capital $100,000. They occupy 20,000 square feet of land, located on Marginal street, on which are the following buildings. A factory 38x127 feet, store-house 30x100 feet, seed store 20x86 feet and a building 23x45 feet, containing 5 tanks capable of holding 70,000 gallons of oil. This company employ 30 hands and manufacture linseed oil. An engine of 100 horse power built by Bisbee, Endicott & Co. of this place, with 3 flue boilers built by Thomas Cunningham of Charlestown, Mass., drive their machinery. They use 5 hydraulic presses and are making 2,500 gallons of oil per day.

NATIONAL BRIDGE AND IRON WORKS, Blodgett & Curry, Proprietors, established Jan. 1st, 1869. They occupy two buildings 60x80 and 50x170 feet respectively, and employ 25 hands. They manufacture long span iron bridges, roof trusses, boilers and general iron work. They make a specialty of an arched bridge which they can construct in spans of one thousand feet with ease. Their office is located at No. 46 Congress street, Boston, Mass.

SAMUEL PAGE & SON, occupy 8 wooden buildings, covering about 10,0000 square feet of land located on second street, for the manufacture of patent paraffine and bright varnish, roofing materials, navy pitch, tar and oils, and have 4 employees. Their office and sales-room is at No. 4 Liberty Square, Boston, Mass.

A. W. & H. C. ROBERTSON,
Manufacturers of
AMPLERS, FERNERIES, CUSPIDORES,
And all kinds of
FANCY FLOWER AND GARDEN POTS.
Marginal, corner of Willow Sts., CHELSEA, MASS.

THE BAY STATE FIRE BRICK AND CLAY RETORT WORKS, Davis & Chaddock, proprietors, was established in 1852. They occupy a 2 story wooden building, 60x60 feet, and 2 smaller ones, 30x80 feet and 28 x 38 feet respectively. The works are situated on Pratt's wharf, in which are manufactured clay gas retorts, tile, fire brick, &c., of a superior quality. They employ 9 hands, and produce 300,000 brick per annum. A 25 horse power engine supplies their motive power. This firm have a warehouse at Nos. 125 and 127 Water street, Boston.

R. H. PEVERLY, brass founder, occupies a 2 story wooden building, 32x40 ft., with a wing 25x50 feet, and store house 20x37 feet, situated on Marginal corner of Pearl street, for the manufacture of brass castings of every description. He commenced business in 1849. Has 5 furnaces used for melting purposes.

J. C. PEAK occupies 1 floor, 40 x 70 feet, in a 2½ story wooden building, located on Broadway, near Chelsea bridge, for the manufacture of wooden packing boxes. He commenced business in 1860. Has 6 employees and turns out 300 per day.

WALTER DAVIDSON occupies 3 rooms, 50 x 35 feet, in a wooden building, located on Suffolk street, and manufactures grain and split leather. He commenced business in 1857, and employs 6 hands; turns out 150 sides of leather per week, and does business to the amount of $30,000 per annum.

C. F. AUSTIN & Co. occupy a 2½ story brick building, 125 x50 feet, used in the manufacture of ship bread and all kinds of crackers, and located at the corner of Marginal and Shawmut street. A 25 horse power engine, built by Allen & Endicott, Cambridgeport, Mass., supplied with steam from one flue boiler and one Harrison boiler, 20 horse power each, drive their machinery. They employ 12 hands, and bake 75 bbls. of flour per day. They have a store at 116 Commercial street, Boston.

SAMUEL PAGE & SON occupy 40,000 square feet of land, located on Summer street, for the manufacture of patent, paraffine, bright and black varnishes, roofing composition, tarred roofing and dry sheathing paper. They commenced business in 1851, and employ from 10 to 15 hands. This firm have in use 4 stills and do a business of $50,000 per annum.

BAKER & DOWNS, occupy a 2 story wooden building 22x 100 feet, located on Marginal street, for the manufacture of fine table salt. They commenced business in March, 1864, and employ 7 persons. Their machinery is driven by a 25 horse power engine built by Wise & Bird of East Boston, with one flue boiler 31 feet long 4 feet diameter built at East Boston. They grind 8½ tons of rock salt per day. Their office and salesroom is at No. 19 Commerce street, Boston, Mass.

J. J. PIKE & Co. occupy the basement, 130x40 feet, of a four story brick building, known as the bank building, and located at No. 105 Winnisimmet street, for the manufacture of the magic cleansing cream for clothes and house cleaning. They commenced business in 1864, and have three employees.

A. W. & H. C. ROBERTSON, occupy 5,000 square feet of land, located on Marginal street, for the manufacture of fancy flower and garden pots of every description. Commenced business in June, 1868, and employ 5 hands.

JOHN FOLLIS, occupies three rooms 50 feet square in a 2½ story wooden building, located on Suffolk street, for the manufacture of calf skins. He commenced business in 1852, employs 10 hands and turns out 500 skins per week. Doing business amounting to $40,000 per annum.

J. W. STICKNEY & Co., occupy a 2 story wooden building 50x100 feet, used in the manufacture of whiting and Paris white, also roofing materials and naval varnishes. They commenced business in 1863, and employs 10 hands. This firm have a capacity for grinding 1,000 tons of chalk, producing thereby from 5,000 to 6,000 barrels of whiting per annum. Office and salesroom No. 64 Broad street, Boston, Mass.

ELLIS & G. F. SLADE, occupy a 2½ story wooden building 25x75 feet, and manufacture snuff and cigars. Commenced business in 1865, and employ 10 hands. They have an office and salesroom at the corner of Broad and Central streets, Boston, Mass.

KINCAID & Co., occupy one floor 25x62 feet in a 2½ story wooden building, located on Broadway near the end of Chelsea bridge, for the manufacture of L. E. Ransom's patent knuckle washing machine. They commenced business in September, 1868, and have 3 employees.

MERRIAM & PUTNAM occupy two floors 30x115 feet, in a 2½ story wooden building, located at No. 63 Second street, where they manufacture paper hangings of every description. The business was first established by Mr. Merriam in 1843, he forming a copartnership with Mr. Putnam in September, 1868. They employ eight hands.

JAMES STONE occupies one floor in a 2½ story wooden building 120x30, situated at No. 63 Second st, where he employs 5 persons in the manufacture of curried leather for boots and shoes. He commenced business in 1865, and now produces 125 sides per week. His machinery consisting of stuffing wheel, glassing and splitting machines, &c., is driven by an engine of five horse power supplied with steam from a boiler of 10 horse power.

A. B. CHARD occupies 4,500 feet of land on Willow street for the manufacture of black, bright and furniture varnish, japan, black walnut, mahogany and rosewood stains. He commenced business in 1860, and has two employees.

T. W. BAILEY & Co., manufacturers of rosin oils, naptha and varnishes, occupy 26,000 sq. ft. of land, two-thirds of which is covered with wooden buildings, located on Willow street. They commenced business in 1848 and have six employees. Their works are driven by two engines, one 4 horse power, built by Allen & Endicott, of Cambridgeport, and the other six horse power, built by the New England Steam Pipe Company.

WILLIAM SUTTON occupies two wooden buildings, one 16 x9 feet, the other 18x27 feet, located at 51 Hawthorn street, for the manufacture of knitted fancy woolen goods. He commenced business in 1863, and employs six hands. Does a business of $10,000 per annum.

LYMAN M. MILLER, successor to Salmon Miller & Son, occupies 5,000 square feet of land, located on Marginal corner of Willow street, for the manufacture of varnishes and japans. He commenced business in 1840, has 3 employees and does a business of $150,000 per year.

THE CHELSEA DYE HOUSE & LAUNDRY, E. E. Sibley, agent, occupies 2 floors 40x160 feet in a 3½ story brick building, used for laundry purposes; also, one wooden building 62x150 feet, used as a dye house, located on Williams street. The business was established some 30 years since, and gives employment to 125 hands. Their power is furnished by a 20 horse power oscillating steam engine. They also have 3 boilers used for supplying the engine with steam and for dying and heating purposes.

C. W. COCHRANE & Co., office 104 Water street, Boston, Mass., occupy 20,000 square feet of land, located on Marginal street, for the manufacture of slate, tin, copper, and Rogers' Patent Cement Roofing, giving employment to 35 hands. They commenced business in 1861, and consume 500 tons of roofing felt, 250,000 gallons of roofing composition, 3,000 tons of gravel and sand, 3,000 boxes of tin, and 10,000 squares of slate per year. This firm are the sole manufacturers and proprietors of Rogers' Patent Cement Roofing, which combines all the advantages of the gravel roofing, being composed of the same materials for its foundation, to which is added a fire proof cement of excellent quality. It is the only roofing ever invented which is thoroughly fire proof. Those wishing to lease rights or purchase county rights in Maine, New Hampshire, Vermont or Massachusetts, can do so by applying to S. J. Tuttle, firm of S. J. & T. Tuttle, builders, 166 Newton street, Boston, Mass. This firm do business amounting to $100,000 per annum. (See advertisement, page 194.)

DANIEL CURRY, occupies 20,000 square feet of land, located on Middlesex street, where he employs six hands in the manufacture of rosin oils. The business was commenced in 1865. He consumes 160 barrels of rosin and turns out from 50 to 75 barrels of oil per week.

CHAPMAN & SODEN, occupy 18,000 square feet of land, located on West Third street, for the manufacture of roofing felt and roofing materials of all kinds. The business was established in 1867, and employs 12 hands. This firm consume 350 barrels of tar, 50 tons of dry felt and 200 barrels of roofing composition per month, and manufacture 1,000 tons of roofing felt per year, doing business amounting to $100,000 per annum.

THE BOSTON ELASTIC FABRIC CO., established in 1863, capital, $400,000: occupy a four story brick building 250 x50 feet, with dye-house 80x25 feet, and engine room 80x 40 feet, located at Caryville station, Chelsea. They manufacture suspenders, garter works, braids and cords of various kinds, black gusset work, india rubber thread, and other rubber goods, and employ 200 hands. Their machinery is driven by two steam engines, one 175 horse power built by the Corliss Steam Engine Company of Providence, R. I., and the other an engine of fifty horse power built by Cook, Rymes & Co., of Charlestown, Mass., supplied with steam from four ten feet tubular boilers. Their office is at No. 28 Milk street, Boston Mass.

WABAN MILLS, capital $50,000; occupy four acres of land on which are three buildings, one, 100x30 feet, one, 60x30 feet, and one 50x40 feet, located at Charles River village, Mass., for the manufacture of dry sheathing felt. This Company consume annually 1,500 tons of rags and manufacture 1,000 tons of dry sheathing paper per year. The works are driven by an engine of 50 horse power with three tubular boilers; also three water wheels of 125 horse power. They employ 12 hands and do a business of $150,000 per year.

CHEMISTRY, (See Bleachery and Chemistry.)

CHESHIRE, 11 miles from Pittsfield, and 9 from North Adams, a village and town on the Pittsfield and North Adams Railroad. The village has a population of about 800 inhabitants, and 2 churches. The Hoosack river passes through the town. Although a mountainous township, the soil is moderately productive. Incorporated 1793.

DEAN & MARTIN, manufacturers of lumber and barrel stock, established their business in 1855. Their main building is 108x40 feet, with a wing 40x30 feet. They manufacture barrels and half barrels, building timber, boards, cheese boxes, &c. They employ from 40 to 50 hands, producing $300 worth daily.

RICHARDSON & WILKINSON established business in 1846, manufacture card leather. Employ 15 men the year round, besides 8 men extra in the bark peeling season, (summer) and 3 teams in the bark drawing season, (winter.) Outside of that they take in all the hemlock bark that may be drawn to them by farmers, which is in considerable quantities, averagiug about 400 cords annually. They produce some 12,000 sides card leather, and do a business of about $75,000 per annum.

CHESHIRE HARBOR, 6½ miles from North Adams, and 13½ from Pittsfield, a flag station of about 100 inhabitants in the town of Cheshire, on the Pittsfield and North Adams Railroad.

ELISHA JENKS, commenced business here in 1828, for the manufacture of 60x64 print goods. The main building is 110x44, 3 stories, wing 75x30, 2 stories, boiler house 24x28, runs 100 looms, 3,768 spindles and use about 3,600 lbs. cotton per week, and turn out about 100,000 yards cloth per week, employing 60 hands. The motive power is furnished by a 40 horse turbine and 20 horse overshot wheel.

CHESTER, 74 miles from Albany, and 126 from Boston, a station and town by the same name, on the Boston & Albany Railroad. There are 2 churches near the station. The town is mountainous, but good for grazing and watered by the branches of the Westfield river.

CHESTNUT HILL, a country station of about 50 inhabitants, 6½ miles from Boston, and 31 from Woonsocket, on the Woonsocket division of the Boston, Hartford & Erie Railroad. The railroad here passes through a narrow cut through the rocks, the depot being situated over the car track.

CHICOPEE, 3 miles north from Springfield, on the Connecticut River Railroad; a village and town situated on the east side of the Connecticut river at the confluence of the Chicopee and the former river. The village was formerly called Cabotville The Chicopee Falls Branch leaves the main road here.

C. M. KENDALL is engaged here in the manufacture of harness reeds, having commenced the business in 1836 at Palmer, where he continued the business until 1854, when

he removed his business to this place, occupying part of a two story brick building 60x32 feet. He employs five hands, running eight machines, driven by power furnished from the Dwight mills.

Dwight Manufacturing Co. This company, one of the largest in New England, was incorporated and commenced operation in 1841. The company has a capital of $1,500,000. D. N. Spooner, Treasurer of Boston. Geo. H. Nye Agent at mills. They run 7 mills 50x175 feet each, 5 and 6 stories high built of brick. The capacity of the works is 1,826 looms, 76,528 spindles, employ about 1,700 hands, and produce 13,000,000 yards shirting, sheetings and print goods, consuming 4,500,000 lbs. cotton per year. Eight turbine wheels under 25 to 30 feet fall and a Corliss steam engine of 450 horse power, furnishes the impetus for the machinery. Minot, Hooper & Co., Boston and New York, selling agents.

"Variety Tannery," Cotton Ely, Proprietor. Business established about 1790. His works are located 1½ miles from Chicopee Station, and employ from 8 to 12 hands, manufacturing calfskins, saddle, bridle, harness and upper suspender leather. Has a capacity for producing from 5,000 to 6,000 sides per annum, and does a business of $40,000.

CHICOPEE FALLS, 5½ miles from Springfield, at the terminus of the Chicopee Falls Branch, and 2½ from the village of Chicopee, on the Connecticut River Railroad. A village of about 3,000 inhabitants, in the town of Chicopee, noted for its varied and extensive manufacturing establishments. There are 3 churches, viz.: 1 Congregational, 1 Methodist, and 1 Baptist. An extensive water power is furnished by the Chicopee river, which flows through the centre of the village.

J. Stevens & Co. commenced business here in 1864, for the manufacture of Stevens' patent pocket pistols; also, dividers, callipers, screws and other small tools. They occupy a 2 story building, 60 x 36 feet, employing from 25 to 30 hands. Their machinery, consisting of the usual machines used by manufacturers of this kind, is driven by a 12 horse turbine wheel and a 6 horse engine, built in Worcester.

Chicopee Manufacturing Company. This company was established in 1823 for the manufacture of cotton goods. They have now in operation four mills running 51,300 spindles, 1,192 looms, manufacturing about 9,500,000 yards per annum, from 30 inch to 126 inches wide, and from 48 to 84 threads per square inch. Consume 7,500 bales cotton. They employ 1,200 hands. Their power is furnished from 850 horse (combined power,) turbine (Holyoke) wheels, under 20 feet fall.

Agents in New York and Boston, E. R. Mudge, Sawyer & Son.

Whittemore, Belcher & Co., manufacturers of plows, horse rakes, feed cutters, and corn shellers. The business was established in 1843 by John W. Belcher. They occupy eight buildings, which cover about one acre of ground. They employ from 40 to 60 men and produce about 6,000 plows yearly; but their principal business is making horse rakes, &c. The manufactory is located on Chicopee river; has 15 feet fall of water. They have an office in Boston, at 34 Merchants Row, and sell a large amount of goods yearly for shipment to foreign ports, as well as for home consumption.

Chicopee Falls Hosiery Co., manufacturers of hosiery. The size of the buildings is as follows: main building is 40x80 feet with an L 26x60 feet; store house is 30x40 feet. They employ 100 operatives and manufacture 30,000 dozen Potter's patent hose, yearly. They use an engine of 16 horse power. The factory is located on Chicopee river, and has a fall of eight feet. O. H. Sampson & Co.. are agents, Boston and New York.

Lamb Knitting Machine Manufacturing Co., were incorporated in 1867, for the purpose of manufacturing family knitting and sewing machines. They occupy the following buildings: main shop 180x40 feet, three stories, foundry 80x40 feet, and blacksmith shop 40x35 feet. Capital, $200,000. They employ 150 men and make 3,000 knitting machines and 2,000 sewing machines yearly, doing a business amounting to $250,000. They use steam and water power. T. C. Page, agent and treasurer.

Belcher & Taylor, Agricultural Tool Company, were incorporated November 1st, 1864, with a capital of fifty thousand dollars. The business was established by B. B. Belcher in 1851, for the purpose of manufacturing agricultural tools of every description. Size of buildings, as follows: main building is 275x40 feet, two stories; foundry 90x40 feet, one story; blacksmith shop, 35x25 feet, one story. They employ 45 men and produce 3,500 hay cutters, 500 corn shellers and 225 hay tedders, besides a large number of plows, cultivators, horse rakes, etc., yearly. Amount of business $80,000 per annum. They use a Washington water wheel, also a forty horse power engine as an auxilliary power. The engine was built by George Dwight, Jr., Springfield. Their productions are all of the best quality.

CITY MILLS, situated about half a mile from the depot, containing about 200 inhabitants, 24½ miles from Boston and 45½ from Southbridge, on the Boston, Hartford & Erie Railroad.

CLAPPVILLE, (See Rochdale.)

CLEMATIS BROOK. A flag station on the Boston & Fitchburg Railroad, about half a mile from the Waltham station towards Boston.

CLIFTONDALE, 4 miles from Lynn, and 9 from Boston, a village on the Saugus Branch of the Eastern Railroad, containing about 600 inhabitants and 1 Methodist church.

Sweetzer Bros. occupy a 2 story wooden building, 60x 30 feet, located on Lincoln avenue, at this place. Also, occupy a 1 story building, 20x40 feet, located on Central street, Saugus, Mass., for the manufacture of snuff and cigars. Commenced business in 1838, employ from 15 to 20 hands, turn out 16 bbls. of snuff per month.

H. B. Newhall, occupies a 2 story wooden building 40x 40 feet, a store house 40x30 feet, located on Lincoln Avenue, commenced business in 1856 for the manufacture of coffee, cream tartar and spices. Employs 2 hands, turns out 4000 lbs. of spices and 1 ton of cream tartar per month, machinery is driven by 2 turbine water wheels each 7 feet in diameter.

S. S. Trull, occupies a one story wood building 24x60 feet, located on Lincoln Avenue, for the manufacture of cigars, where he employs 5 hands, turns out 900 cigars per week and does a business of $4,000 per annum.

CLINTON, 17 miles from Worcester, 29 from Nashua, 45 from Boston and 13 from Fitchburg, situated at the junction of the Worcester, Nashua and Boston, Clinton and Fitchburg Railroads, contains 5,000 inhabitants, five churches, one National and one Savings bank.

J. B. PARKER & Co. commenced business in 1853 for the manufacture of carpet machinery. The business was established by J. B. Parker in 1848. Their machine shop is situated below the depot, near the Worcester and Nashua Railroad, and is 100x35 feet, two stories, built with an ell, 60 x 35 feet, two stories. They employ 50 hands.

From a 25 horse power Corliss steam engine they derive their motive power. Furnished with steam from a Putnam Machine Co.'s flue boiler.

CLINTON WIRE CO., E. B. Bigelow, president; C. A. Whiting, treasurer; C. H. Waters, agent; manufacturers of wire cloth nettings, railings, fencings. They run three mills, No. 1, 175x40, one story; No. 2, 175x40, two stories; No. 3, 250x120, one story. These mills are for weaving, and contain twenty-five looms, built by themselves, each loom weighing 15 tons. Machine shop 60x50, three stories; boiler-house 50x30, one story, containing a 75 horse power tubular boiler, made by J. R. Robinson; this boiler furnishes steam to heat the buildings, also to drive a Hoadley engine which furnishes the motive power. Employ 75 hands. They manufacture wire five sizes smaller than a cob-web to wire ¼ inch in diameter; also guards, protecting windows for Lunatic asylums, jails, banks, and other public or private buildings. This company have a contract to furnish wire fencing for the Chicago, Rock Island, and Pacific Railroad, along the entire route.

LANCASTER QUILT CO. was established in 1840. In 1864, it was sold to Messrs. Jordan, Marsh & Co., the well known commission merchants, of Boston.

This establishment is situated just below the depot, near the Clinton & Boston Railroad, for the manufacture of counterpanes. Their main building is 152x45 feet, 3 stories and attic; picker house, 50 x 35, 1 story; bleachery, 150 x 40, 1 story; dry house, 400 x 20, 1 story; boiler house, 40 x 20, 1 story; coal house, 60 x 20, with a capacity for storing 300 tons coal. They employ 90 hands, running 38 looms, using about 40 bales cotton per week, or 18,000 lbs., and producing 1,500 counterpanes, from 9-16 to 11-4 in width. Their motive power is furnished from a 5 ft. turbine wheel, under 27 feet head, and one breast wheel, 10 feet diameter, 8 feet bucket; also, a 30 horse power Tufts engine, furnished with steam from 2 tubular boilers, maker unknown.

In the yard of this company there is a never-failing spring of water which supplies the bleachery by means of pipes underground. This water is very pure, making the goods look whiter than can be done by any other water in Clinton. It is splendid drinking water.

C. M. BAILEY & SON. C. M. Bailey commenced the manufacture of leather in Sterling in 1850, and continued until 1860, when he admitted his two sons, George E. and Charles E., into partnership, with him. In 1865 Charles E. died and the business is now carried on by C. M. Bailey & Son. In 1868 they had the misfortune to be burned out, and immediately commenced to build their new works in Clinton. Their works are situated on Franklin street, about half a mile from the depot, and consist of a tannery 40x100 feet, 1 story, containing 62 large vats. Mr. Bailey thought the old way of letting the water out of the vats by way of conductors from the bottom a very inconvenient one, as they were liable to get filled with refuse, which always settles at the bottom. They have adopted the plan of pumping the water off by a rotary pump. The Leach house, 24x30 feet, 2 stories, adjoining, contains 2 Allen & Warren's Patent Leachers, with a capacity of holding 5 cords of bark each. The engine house, also attached to the tannery, is 24x40 1 story, containing a 30 horse power engine, furnished with steam from a flue boiler, both made by Tufts of Boston; furnishing house, 30x60 feet, 2 stories; hide house, 25x30 feet, 1 story. They employ 25 hands and will turn out 15,000 calf skins and 2,000 hides per year, using 500 cords of hemlock bark.

FLETCHER, HITCHCOCK & GUSHEE, commenced business on High street, in their new 4 story building 63x33 in 1865, for the manufacture of ladies and children boots and shoes, they employ 50 hands and turn out on an average 24 cases, 60 pairs to a case per week. Their work mostly is done by machinery, driven by an 8 horse power engine made by Pratt of Boston, with steam furnished from an upright flue boiler.

G. M. PALMER, commenced business in 1846, for the manufacture of all kinds of casting, his foundry building is situated next to Messrs. Parker & Co.'s machine shop near the Nashua Railroad. He employs 20 hand, and turns out about 10 tons iron castings per week.

GEO. H. FOSTER occupies a 3 story building, 44x24 feet, with an L of the same height, 26 x 21 feet, for the manufacture of leather belting, currying leather and covering top rollers. The business was originally established by the present occupant's predecessor, in 1845, and has been carried on in the above name since 1853. He employs 5 hands, and does a business of about $25,000 per annum. He uses to run his machinery a 5 horse power engine, made by J. C. Hoadley & Co., of Lawrence, Mass.

SIDNEY HARRIS & SONS. Business established in 1823. They occupy, for the manufacture of staple and fancy horn combs and shell jewelry of every description, the following buildings: One mill, 190x30 feet, 2 stories high, with engine and boiler house attached; another, 150x25 feet, and a store-house 100 x 24 feet. Employ from 75 to 100 hands. The power to drive their machinery is furnished by 2 tubine water wheels of 50 horse power each. They also have for warming the mills a steam boiler of 75 horse power.

THE LOOM HARNESS business now carried on by William H. Gibbs was first established by Deacon James Patterson in 1843, Mr. Gibbs now occupies second story of building owned by Geo. H. Foster, and employs 30 hands, making all kinds of harness knit by machinery and by hand, including double or single knot both top and bottom of the eye and double or single knot with loop. The latter kind being made by machinery and giving general satisfaction. These machines will knit 4 times as fast as any other, tieing from 80 to 100 eyes per minute.

FULLER AND BIGELOW, manufacturer of hoop skirts, tape and webbing, commenced business in the year 1860. They occupy two 2 story buildings, one 40x70 feet, the other 30x75 feet with basement, and employ 50 hands when the mill is in full operation. They use water power—25 horse.

LANCASTER MILLS established in 1844. The mill building is 3 stories in height, covering an area of 256,000 square feet. About 500 males and 500 females are employed in the manufacture of ginghams, of which 26,000 yards are produced per day or 8,000,000 yards per annum, 28,128 spindles and 856 looms are run, and 1,500,000 lbs. cotton consumed annually. The motive power that drives the machinery is supplied by water wheel, (Otis Tufts make,) under 30 feet fall. Franklin Forbes, agent, and Geo. H. Weeks, superintendent. Upham, Tucker & Co., agents, New York and Boston.

COHASSET, 21¾ miles S. E. from Boston; the terminus of the South Shore Road. A small village, situated in a town by the same name, located on Massachusetts Bay, noted for its rocky coast and numerous shipwrecks. Cohasset has become a great resort for citizens and strangers in the summer months.

Population, 2,090; number of vessels in the fisheries, 17; number of packets, 2; number of men employed, 170; capital, $125,000. Number of polls, 561. Amount of taxable property, $1,627,318. Rate of taxation, $10 on $1,000. Acres of land, 5,041. State, county and town tax, $17,395 10. Highway tax, $2,500. Poll tax, $1,182.

COHASSET NARROWS, so named from the rapid and narrow channel which runs into the bay. There is no regular village here, houses scattered. Vessels of 200 tons bring coal here for the glass works at Sandwich, and take in return a freight of glass ware. This station is situated 54¾ miles from Boston and 25 from Hyannis on the Cape Cod Railroad.

COLLEGE HILL, 4 miles from Boston. A station on the Woburn Branch Railroad.

COLTSVILLE, 3 miles from Pittsfield and 17 from North Adams. An enterprising manufacturing village on the Pittsfield and North Adams Railroad.

CONCORD, 20 miles from Boston, and 30 from Fitchburg; a village and town on the Boston and Fitchburg Railroad. The village contains two churches, one bank and about 800 inhabitants, and situated on the Concord river.

This town was the first inland settlement in the colony of Massachusetts. The township was originally six miles square, and derives its name from the harmony in which it was purchased from the natives. Its Indian name was *Musketaquid*. It was in this town that the first regular and effectual resistance was made and the first British life was taken in the war of the revolution.

DAMON, SMITH & CO. are successors of a concern who established business in 1808. The old mill formerly occupied was burned June 19th, 1862, and rebuilt of brick in the same year. The buildings occupied are as follows: Main mill, 105x53 feet, 5 stories, with a wing 4 stories 30x30 feet, for engine, picker and cloth room; another wing, 36x50 feet, 2 stories, containing dressers, dryers, &c.; and one 20x45 feet, 3 stories, in which is located the office, store rooms, &c.; 1 brick storehouse, 3 stories, 40 x 80 feet, used for storing and wool sorting. They also have, connected with the mill property, 40 tenement houses. They employ 100 hands, manufacture flannels of various descriptions, including the widely known and celebrated "Damon's Original Domett," and the Concord Shaker flannels. Also, make and sell cotton warp. They consume from 160,000 to 200,000 lbs. wool, and from 150,000 to 175,000 lbs. cotton annually, produce about 900,000 yards various styles of all wool, cotton warp and cotton mixed flannels, and do a business of $350,000 per annum. The machinery used consists of 7 sets woolen cards and 3000 spindles, 20 cotton cards and 1,144 spindles, (making yarn from No. 8 to No. 36;) and 66 narrow and 14 broad looms. The motive power used to drive their machinery, is furnished by two 58 inch bronze turbine wheels, built by Kilburn, Lincoln & Co., Fall River, Mass., 1 steam engine 35 horse power, built by Messrs. C. H. Brown & Co., Fitchburg, Mass., and two 4 by 16 feet tubular boilers, built by Messrs. Dobbins & Crawford, Lowell. The Messrs. D. S. & Co. have also a three story wooden building 36x75 feet, used for grist mill, door, sash and blind manufacturing, with wing 18x50 feet for circular saw mill. To drive the machinery, one 48 inch and one 36 inch patent turbine wheel is used, made by the Suraine Turbine Wheel Co., North Chelmsford, Mass.

The agents for the company in New York, Boston and Philadelphia, are Messrs. Dale Brothers & Co.

CONCORD TURNPIKE. About 5 miles from Boston; a flag station on the Watertown Branch.

CORDAVILLE, 27 miles from Boston and 17 from Worcester, a station in the town of Hopkinton, on the Boston and Albany Railroad. Branches of Charles and Mill rivers rise in this town. The village of Hopkinton is situated 2 miles from the above station, and has 4 churches.

CORDAVILLE MILLS occupy 2 brick mills, 1st 120x45 feet, 2d 66x45 feet; also 3 store houses. 1st 44x66, 2d 30x100 feet, 3d 40x50 feet, commenced business 1864, for the manufacture of woolen blankets, cotton twine, &c., employ 160 hands, run a steam engine of 30 horse power, also a new 40 inch water wheel, turn out 2,000 blankets per week.

CROOKS & CO. occupy a 3 story wooden building with basement 40x80 feet, also a wing 35x48 feet, located at corner Main and Mount Auburn street, Hopkinton, employ 200 hands, commenced business in 1859, for the manufacture of men's and boy's boots, turn out 275 cases of boots and consume 825 sides of leather per week, power supplied by an 8 horse power engine, 1 boiler made by Endicott & Allen, Cambridgeport, Mass., do a business of $400,000 per year. Salesroom 83 Pearl street, Mass.

J. L. GORHAM & CO. occupy a three story wooden building 28x80 feet, located at the corner of Hayden Row and Pleasant street, Hopkinton, for the manufacture of men's, boys' and youths' boots. Employ 100 hands, turn out from 80 to 100 cases of boots per week.

RISING, THOMPSON & CO. occupy a four story wooden building, 40x60 feet, located at the corner of Gore and Main streets, Hopkinton, for the manufacture of men's, boys', and youths' thick and kip boots. Commenced business in 1852. Employ 150 hands; run one of A. Leavit's steam engine, 12 horse power, built at Boston, and supplied with steam from a tubular boiler, 30 horse power, built by Chubbuck & Sons, of Boston, Mass. Turn out about 150 cases of boots per week. Office in Boston, 96 Pearl street.

A. COBURN & CO. occupy a 4 story wooden building 60x 40 feet, a store house 25x60 feet. This firm are building an addition on the main building 60x40 feet, located on Hayden Row street, Hopkinton. Commenced business in 1855, and employ 250 hands for the manufacture of men's and boys' boots. They turn out 200 cases of boots per week, consume 800 sides of leather per week. Their machinery is run by a 10 horse power engine, made by Campbell & Whittier, Roxbury, Mass. Steam is supplied by 2 tubular boilers. They do a business of $300,000 per annum.

CLAFLIN, COBURN & CO. occupy a 4 story wooden building 40x110 feet, and a wing 4 stories 30x50 feet for the

manufacture of men and boys' boots. Commenced business in 1848, employ 250 hands, manufacture 1,500 cases (12 pairs per case) of boots per month, consume 5,000 sides of leather per month, use a 10 horse power engine made by Campbell & Whittier, Roxbury Dist. Steam is furnished by 2 flue boilers made by McKay & Gallegar, Boston. This concern is located 2½ miles from Cordaville station.

Hayden Row is situated 4½ miles from the above station, in the town of Hopkinton, and 2 miles from the village of Hopkinton.

Wm. H. Phipps & Co. occupy a 3 story wooden building, 24x130 feet; also a wing 24x30 feet, located on Hayden row. Commenced business in 1860, for the manufacture of boots of all kinds: employ 300 hands, turn out 600 cases of boots per month, consume 1,800 sides of leather per month. Use an 8 horse power engine made by Thomas Leavitt of Boston, Mass., and 1 locomotive boiler, made by Allen & Endicott, Cambridge, Mass.; do a business of $200,000 per year.

L. H. Bowker & Co. occupy a 2 story wooden building, 35x100 feet, with a wing 22x86 feet, located at Hayden row, for the manufacture of boots and shoes of all kinds. Commenced business in January, 1866; employs 100 hands; turns out 150 cases per week, and cut up 1,000 sides of leather. Run a 12 horse power steam engine, built by Allen & Endicott, of Cambridgeport, Mass. Store in Boston, 93 Pearl street.

COTTAGE FARM, 3 miles from Boston and 41 from Worcester. A station on the Boston & Albany Railroad.

COTTAGE STREET, situated 23¾ miles from Boston and 67¼ from Southbridge, a country village of about 200 inhabitants, containing 1 church on the Boston, Hartford and Erie Railroad.

CRANES, 6 miles from Mansfield and 4 from Taunton. A country station on the Taunton Branch.

DALTON, situated 54 miles from Albany 146 from Boston and 44 from Springfield, contains 2 churches and a population of 1,200. The village is situated on the Housatonic River.

Bartlett & Cutting commenced business in 1868 and manufacture blank book and envelope paper. They employ 30 hands and have a capacity for turning out 1,500 lbs. per day. Their machinery is driven by 2 turbine wheels of 48 inches and 20 inches respectively, under 14 feet fall, making a combined power of 100 horse.

Byron Western, commenced the manufacture of writing paper in 1863, as successors to Chamberlin & Co., who established the business in 1855. He employs 35 hands and turns out 750 lbs. paper per day, consuming about 900 lbs. of rags. The names and dimension of his buildings are as follows: 1st main building 100x40 feet, 3 stories, brick and wood, 2d building machine room 30x100 feet, boiler house 30x40 feet, 1 story, containing 2 flue boilers made by Clary, Sedgwick & Russell, also a bleach house 75x35 feet, 1 story. The motive power is furnished by 2 turbine wheels of 60 horse power combined.

Hawkins, West & Co. established business in 1866 for the manufacture of repellents, meltons, balmoral skirts, lap robes, &c. They occupy a 4 story building 50x120 feet, employing 40 hands, running 20 broad looms and turning out 200 yards repellents per day. They also have a boiler house, 30x30 feet 1 story in which is a tubular boiler used for heating the main building. Their motive power is furnished by a 42 inch turbine wheel of 105 horse power under 28 feet fall.

Crane & Co. established business in 1842. They occupy 2 buildings, 80x40 feet and 130x40 feet, respectively, for the manufacture of bank-note, bond, envelope, collar, colored and medium paper. They employ 30 hands, and do quite an extensive business.

Z. Crane, paper manufacturer, commenced business in May, 1865. The mill is constructed of stone, 3 stories high, 120 x 50 feet. He employs 35 hands, and produces from 2,000 to 2,500 lbs. paper per day. The mill contains 5 engines.

Carson Paper Co., manufacturers of first-class note, letter and ledger paper, commenced business in 1801. They occupy a building 200x40 feet; employ 80 hands, and produce 22 tons of paper monthly. Their machinery is driven by water power.

DANVERS, a station and town 4 miles from Salem, on the Lawrence Branch Railroad. It contains a population of 4,500, has a National Bank and 1 Savings Bank, viz:—1st National Bank of Danvers, capital stock $150,000, and Danvers Savings Bank, deposits $450,000. There are 4 churches as follows, 1 Orthodox, 1 Universalist, 1 Unitarian and 1 Episcopal.

Ira P. Pope, established in 1845, the manufacture of men's, boys' and youths' calf and buff leather pegged Balmorals, Oxford ties, Congress boots and women's, misses' and childrens' boots and shoes. He occupies a 3 story building 50x70 feet, employing 125 hands. Has in use 25 stitching machines of different kinds, cutting machine, rolling, finishing machine, &c., driven by power furnished from a Hicks steam engine. The hoisting of goods and stock is done by power from this engine. He turns out about 90,000 pairs of boots and shoes per annum. His office in Boston is at No. 59 Hanover street.

William H. Porter commenced the manufacture of brick in 1868. He makes all kinds of pressed and common bricks, and produces from 6,000 to 8,000 per year, and will fill contracts for any size or shape of brick. He employs from 6 to 10 hands. He consumes about 36,000 cubic feet of common clay and 300 cords of wood yearly. The amount of business done is $12,000 per year.

W. Andrews occupies a 3½ story building, 40x32 feet, located on Maple street, for the manufacture of ladies', misses', men's and children's boots and shoes. The business was established in October, 1861. He now employs from 50 to 60 hands, turns out about 50,000 pairs of boots and shoes per annum, and consumes 70,000 lbs. of sole leather, 100,000 lbs. of upper leather and 600 dozen sheep skins, doing business to the amount of $70,000 per year. Office in Boston, 92 Pearl street.

White & Brother occupy a three story wooden building 60x30 feet, located on Locust street, where they employ 50 hands in the manufacture of ladies', misses' and childrens' boots and shoes. They commenced business in 1865, and turn out 3,000 pairs of boots and shoes per month, and consume 2,000 sides of sole and 6,000 feet of upper leather, and 600 sheep skins per year, doing business to the amount of $40,000.

J. H. Rice & Co. occupy a three story wooden building, 30x40 feet, located on Maple street, for the manufacture of ladies', misses' and childrens' boots and shoes. They employ from 30 to 40 hands, and turn out four cases of boots and shoes per day. Run one pegging machine and six stitching machines, and consume 7,000 lbs. of leather per month, doing business of $60,000 per annum.

At Danvers Centre the manufacturers are as follows:

E. & A. Mudge & Co. occupy a two story wooden building 26x60 feet with an ell 15x20 feet, located on Centre street, for the manufacture of ladies', misses' and childrens' pegged boots and shoes. The business was established in Nov. 1837, by E. Mudge, was changed to E. & A. Mudge in 1849, and to the present firm in 1858. They employ 175 hands, turn out 125,000 pairs of boots, and do, at this factory, a business of $225,000 per annum. They are also interested in several other manufacturing concerns in Massachusetts. Their machinery is driven by an engine of 7 horse power built by John F. C. Rider, of South Newmarket, N. H., furnished with steam from an upright portable boiler.

Hyde, Hutchinson & Co. occupy a two story wooden building 25x35 feet, located on Centre street, for the manufacture of ladies', misses' and childrens' boots and shoes. They commenced business in 1867, employ 20 hands, turn out 350 cases (60 pairs per case) of boots per annum, and do business to the amount of $30,000.

George B. Martin & Bryant occupy a 2 story wooden building, 40x50 feet, located on Adams street, for the manufacture of ladies', misses', and children's boots and shoes. They commenced business in 1847; employ from 40 to 50 hands, and turn out 125 cases per month, (60 pairs per case) doing business to the amount of $150,000 per annum. Their machinery is driven by a caloric engine—Baldwin's patent—of 5 horse power.

M. Sillar occupies a 2 story wooden building, 42x22 feet, located on Centre street, for the manufacture of ladies', misses' and childrens' boots and shoes. He commenced business in 1866; employs 20 hands, turns out 500 cases of boots and shoes, and does business of from $30,000 to $35,000 per annum.

Noyes & Co. occupy a two story wooden building, located on Holton street, and manufacture ladies,' misses' and childrens' boots and shoes.

M. Wells occupies a two story wooden building, 35x24 feet, and one 2 stories 18x32 feet, located on Holden street, for the manufacture of ladies', misses' and childrens' boots and shoes. He commenced business in 1866; employs seven hands, and turn out 3,500 pairs per year.

Preston & Blake occupy a two story wooden building, 24x36 feet, located on Centre street, half mile from the depot, and manufacture ladies', misses' and children's boots and shoes. They commenced business in 1867; employ 12 hands, and turn out 120 pairs per day.

DANVERSPORT, a station on the Lawrence Branch Railroad, contains 1,000 inhabitants, 1 Baptist and 1 Catholic church.

J. Merrill & Co., occupy a 3 story wooden building 38x75 feet with an L 20x20 feet, located on Harbor street, where they employ 15 hands for the currying of leather. They commenced business in 1848 and now curry 13,000 sides of leather per month. They also occupy a one story tannery building 100x40 feet, containing 90 vats, a beam house 46x30 feet, and a store house 38x16 feet, where they employ 3 hands. This business was commenced in 1860. They now tan 5,000 hides per year, and consume 400 cords of bark doing business at both factories amounting to $40,000 per annum.

A. A. Bates, occupies a 3 story wooden building 50x60 feet, located on water street, where they employ 5 hands for the dressing of black morocco. He commenced business in 1860, and now dresses from 6 to 10 doz. sides per day, doing business of from $3,000 to $5,000 per annum.

J. & N. Bragdon occupy a 2 story wooden building, 30x140 ft., store house 30x40 ft. located in the rear of Water st. where they employ 12 hands for the manufacture of all kinds of wooden boxes. The business was commenced in 1853. Their machinery is driven by an engine of 25 horse power built by G. L. Newcomb, of Salem, Mass. This firm turn out from 1,200 to 1,500 boxes per week. Consume 1,000,000 feet of lumber per year, and do business amounting to $30,000 per annum.

Phineas Corning occupies a three story wooden building, 55x35 feet, located on Water street, where he employs 14 hands in the manufacture of ladies', misses' and boys' boots and shoes. He commenced business in 1848, runs one pegging machine, and turns out three cases of boots and shoes per day, consuming 270 lbs. of sole and 360 feet of upper leather, and doing business to the amount of $40,000 per annum.

Smith & Huston occupy a 2 story wooden building, 60x40 feet; also 2 rooms 50x60 feet, for dry house, located on Water street, where they employ 10 hands in the manufacture of Morocco leather of all kinds and colors. They commenced business in 1863, and dress from 250 to 300 dozen skins per month, and do a business of $5,000 per annum. Their machinery is driven by an engine of 6 horse power, built by George L. Newcomb, of Salem, Mass., with a flue boiler, 12 feet long, also built by Mr. Newcomb.

J. Ross & Co. occupy a 3 story wooden building, 45x70 feet, located on Harbor street, where they employ 8 hands for the manufacture of all kinds of wooden boxes. They commenced business in 1866, and turn out 350 dry goods boxes per week, consuming $500,000 worth of lumber per year, and doing a business of $20,000. Ther machinery is driven by an engine of 30 horse power, with 1 flue boiler, built by Campbell, Whittier & Co., of Boston, Mass.

S. P. Fowler occupies a one story wooden building 70x40 feet, a two story wooden building 45x60 feet, and a store house 20x35 feet, located on Water street, for the tanning of leather. He commenced business in 1833 and employs 3 hands.

G. & E. Rowell occupy a two story wooden building 30x80 feet, located on Water street, for the currying of leather. They commenced business in 1856, and employ 10 hands, turning out from 700 to 800 sides of leather per month, doing business to $15,000 per annum.

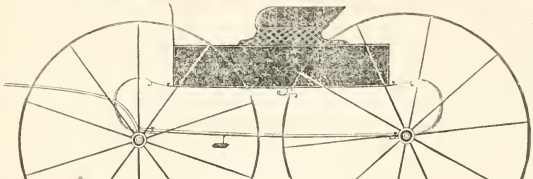
S. F. & J. A. Gray commenced the manufacture of brick in 1866. They employ 20 hands and produce 1,500,000 bricks per year.

DEDHAM, 9½ miles from Boston, at the terminus of the Dedham Branch. This place has about 5,000 inhabitants and four churches; 12 trains run each way to and from Boston, daily. (For manufacturers, see Boston and South Dedham.)

DEERFIELD, 33 miles from Springfield, and 3 from Greenfield. This village is located one mile from the depot, at the junction of the Connecticut and Deerfield rivers, on the West side of the former and both sides of the latter, a village and town by the same name. From the mountains in this vicinity, delightful views

BROWN'S PATENT C SPRING

PLEASURE WAGON.



This is the lightest and most durable carriage in use. Its easy riding, noiseless running, together with its graceful appearance, render it specially desirable for pleasure driving.

For SPEEDING, it is unequalled, as, in addition to its extreme lightness, the spring perch, in combination with the C springs and elastic braces, has a momentum tendency, which greatly facilitates the draught.

It is perfectly free from *rattle*, and the body resting as it does entirely upon the elastic braces, effectually does away with the *disagreeable rumbling* usual in other carriages.

These Wagons are now in use in nearly all the principal cities and towns throughout the country. They have been thoroughly tested; and the superiority of the improvement is conceded by all judges of light vehicles.

Made of the very best materials and workmanship; of every style and finish, with or without tops, and

Warranted to Give Entire Satisfaction.

B. F. BROWN, Dorchester, Mass.

are obtained. Settled in 1668. Deerfield mountain is 700 feet above the plain. Sugar Loaf mountain rears its conical peak of red sandstone 500 feet above the river, and overlooks the ground of many sanguinary battles between the whites and the Indians. This is a place of great interest. While the traveller lingers here, enjoying the beautiful scenery and hospitality of the people of this town, he cannot fail of contrasting the present scenes with those of former years, particularly with that of Bloody Brook, in 1675, when a company of 90 young men from the county of Essex, were slain by ruthless savages. A monument commemorating this event was erected in 1838. In this town are the villages of South and Old Deerfield. No finer farming country can be found in the Connecticut Valley than Deerfield meadows. Large crops of tobacco and broom corn are raised here. The village of Deerfield has 1 church.

DIGHTON, This village is situated about 7 miles from Taunton and 8 miles from Fall River, on the Old Colony & Newport Railroad. Dighton has 7 churches, and is situated on the Taunton Great River, 17 miles from Providence and 40 from Boston and has a population of 1,800. (See also North Dighton.)

DIGHTON ROLLING MILL CO., incorporated in 1866. Wm. Cobb, treasurer and agent; E. W. Barstow, president. They employ 50 hands and manufacture at the rate of 125 kegs of nails per day. The power is furnished by two Corliss engines, one of 150 and one of 50 horse power. They manufacture plates for making tacks and have in use the Dudgeon steam hammer, made by R. Dudgeon of New York.

DIGHTON TACK CO., R. A. Robertson, treasurer and agent. These works were formerly owned by the Union Manufacturing Co., which company built here in 1856. In 1865 they sold to the Dighton Tack Co. They occupy two buildings. Main building, used as factory, 103x40 feet. Packing shop, 35x35 feet, together with two store houses with blacksmith shop attached. They employ about 50 hands. Their power is furnished by a steam engine made by the Corliss Steam Engine Co. of Providence, 40 horse power. They consume in the manufacture of tacks and nails about 600 tons of tack and nail plates, 10 tons of zinc and 2 tons of copper per year.

DODGEVILLE, 32 miles from Boston, 11½ from Providence; a manufacturing village on the Boston and Providence Railroad.

HEBRON MANUFACTURING COMPANY. These mills were built by J. C. Dodge about the year 1838, and were run by what may be known as the Dodgeville Cotton Manufacturing Company. In 1854 these mills were purchased by Messrs. B. B. & R. Knight, of Providence, R. I., and have since that time been used by them for the manufacture of cotton goods. The mill is wood, three stories, 203x40. A fine brick building with French roof, contains engine room, dressing, cloth and marking room. The boiler room is built of brick, and is 26x42 feet. This company employ about 160 hands, runs 170 looms, 8,000 spindles, and consume about 20 bales of cotton per week. The power is furnished by one of Corliss's engines of 80 horse power.

These works have capacity of turning out nearly 150,000 yds. per month. The office of Messrs. B. B. & R. Knight is at No. 26 Exchange Place, Providence, R. I.

DORCHESTER, 5 miles from Boston and 65 from Southbridge, a village on the Neponset river, 1½ miles from the depot in the town of Dorchester, on the Boston, Hartford and Erie Railroad.

D. EDDY & SON. The business, manufacturing refrigerators was established by D. Eddy, in 1847, who is the oldest manufacturer of the kind in the State, he has taken several premiums, awarded by the Massachusetts Mechanics' Fairs, and his refrigerators are considered the best now in use, being packed with charcoal and lined throughout with zinc, and provided with slate-stone shelves. They occupy a 3 story building 40x80 feet, situated on Harrison Square. They employ 15 hands and turn out 1,500 refrigerators and 500 steps per year. This latter article for the use of libra-

ries, china closets, and for removing articles from high shelves, &c., is one of the most useful articles now in use.

B. F. Brown occupies 3 buildings as follows:—150x30, 2 stories, 30x20, 2 stories and 60x20, 1 story. He employs 30 hands, manufacturing the patent C spring wagon, and producing 150 per year. The business was established in 1849. The wagons built by Mr. Brown are very desirable, and are extensively used in different parts of the United States.

R. Gleason & Son, commenced the manufacture of silver plated ware, in 1822. They occupy about ½ acre of flooring on Washington street, and employ 50 hands.

Douglas, situated 48 miles from Boston, 22 from Southbridge, and 30 from Providence, is a village on the Boston, Hartford & Erie Railroad, containing 2 churches and a population of about 200. The village is situated about half a mile from the depot.

The Douglas Axe Manufacturing Co. It is an old and trite saying that people know not, or do not appreciate the magnitude of their own local institutions, until they are made the subject of some scribbler's editorial. There are, however, but few who have not made themselves familiar with the fact that the town of Douglas has, within its limits, the oldest established and most extensive axe manufactory in the United States, or the world.

Axe making was first commenced in this town more than half a century ago by Dea. Oliver Hunt, who carried on the business of a blacksmith in an ordinary looking shop, still standing upon the principally street of the village. From being frequently called upon to repair the broken axes of farmers living in the vicinity, the idea was suggested to him of making axes from a model of his own, and a barrel of them was soon sent to market at Providence. The business thus established gradually increased, until the year 1836, when the present campany was incorporated.

The company has invested in the manufacture of axes and edge tools, a capital of $400,000. Their works are four in number, each comprising several shops, and for propelling their machinery one turbine water wheel and eight breast wheels are used. In the summer of 1866, water becoming low in the Mumford river, upon which the works are located a large engine of 100 horse power was put up at an expense of about $15,000. It has ever since remained idle, the river furnishing a sufficient quantity of water for all purposes.

1,500 tons of iron and 300 tons of cast steel are used each year, and the consumption of coal for heating purposes amounts to upwards of 2,000 tons. The company employ over 300 hands, and have facilities for manufacturing nearly $1,000,000 in goods annually. Use 1,200 tons of grindstones.

Besides axes, the other implements manufactured are adzes, hatchets, picks, mattocks, knives, the Spanish axe (an odd pattern, made expressly for exportation to Spain,) and the Spanish machetes, an implement used in Cuba for cutting wild cane, also for warfare. Their goods are used in all parts of the world, orders being frequently received not only from the various countries in Europe, but from Cuba, Australia, South America and Africa. The company received a silver medal at the Paris Exposition, the only one awarded, a fac simile of which may be seen at their counting room.

Not less than twenty-five men are employed on every axe before it reaches the packing room. Certain marks are made upon each one as it passes through the hands of the forgers and temperers, so that any defect in its manufacture can be easily traced to its author. Most of the operatives are paid by the piece, each room being under the charge of an inspector who exercises a general supervision over the operations in his department.

Dover, 15¾ miles from Boston and 21¾ from Woonsocket. A village situated on the Charles River and Woonsocket division of the Boston, Hartford and Erie Railroad, containing three churches. The town of Dover has a very uneven surface.

Dunstable. (See Tyngsboro' and Dunstable.)

Dwights, 80 miles from New London and 20 from Grout's Corner, (now Miller's Falls,) a country station on the New London Northern Railroad.

East Abington, 19½ miles from Boston, on the Hanover Branch of the Old Colony and Newport Railroad. A village containing two churches and 4,000 inhabitants.

C. H. Dill, 2d, Union street, near the Post Office. He commenced business about the year 1864; employs 25 hands, and has a capacity for turning out 150 cases of boots and shoes per week.

Abner Curtis, Union street. Mr. Curtis established business about 1820, and employs nearly 150 men, manufacturing shoes and Congress boots. He occupies five buildings, one of them three stories. Salesroom No. 51 Pearl street, Boston, Mass.

S. Reed, Jr., Union street. Mr. Reed commenced the business in 1856, and usually employs about 50 hands, turning out on an average, 25 cases per week.

Manufactures buff and creoles and balmorals of the finest quality.

C. W. Torrey, Union street. Mr. Torrey began business about the year 1865. He employs about 50 hands, and turns out 100 cases per week. The building is of wood, two stories high.

Ira F. Lowell, North avenue, near Union street. Mr. Lowell established business in 1859, and employs about 30 hands. This factory has capacity for turning out 2,400 pairs per week of boots and shoes, 100,000 pairs per year, being over 5,000 cases. Mr. L. occupies one building, of wood, 2½ stories high, and about 45 feet by 32.

Leander Curtis, Union street. Mr. Curtis established business in 1843, and on an average employs about 8 hands, and has a capacity of turning out 600 cases per year. He occupies one building, of wood, two stories high, and about 20 feet by 32.

Joshua Curtis, Jr., Union street. Mr. Curtis commenced here about 1848, and employs about 10 hands. He has two buildings on Summit street, for fitting and cutting sole leather. This establishment has a capacity for turning out about 80 cases per week.

Jacob Whiting & Co. This firm was established about the year 1853, for the manufacture of boots and shoes. They employ about nine men in the factory and 25 or 30 hands outside. This firm has a capacity for turning out 50 or 60 cases per week. They occupy one 2 story building.

Jenkins Lane & Sons, Market street, at the head of Un-

ion street. This firm was established about the year 1835, by Mr. Jenkins Lane. The main building was built in 1859, and is three stories high, 40 feet by 80.

The power is furnished by an engine of 10 horse power, manufactured in Chelsea. The basement is used for cutting and fitting.

DANIEL BLANCHARD occupies a building 25x67, two stories, wood, for the manufacture of men's calf boots. He employs 25 persons, produces 20 cases per week, and does a business amounting to $50,000 per year.

C. H. LANE commenced the manufacture of men's boots and shoes of all kinds, in July, 1867. The building is 25x 67, three stories, wood. Employs 40 persons, produces 50 cases per week, and does a business of $100,000 per year.

STUDLEY & TURNER occupy a building 40x25, four stories, for the manufacture of men's boots and shoes. Employ 70 persons, produce 1,500 cases per week, and does a business of $80,000 per year.

MELVIN SHAW commenced the manufacture of men's boots and shoes in 1864. He employs 30 persons, and occupies a building 22x32, three stories; produces 1,500 cases yer year and does a business of $20,000 per year. The boots and shoes are not cut here, but made up for other parties.

GEORGE B. CLAPP occupies a building 80x46, three stories with wing 60x35, three stories, for the manufacture of men's shoes and overshoes, commencing here in 1861. He employs 250 persons and produces from 6,000 to 8,000 cases per year, doing a business of $350,000.

J. F. DANE, GRINNELL & Co. manufacturers of men's fine calf boots, Oxford brogans, &c. They occupy two shops, one 125x45 feet, three stories high, and the other 125x30 feet, two stories. They employ 100 hands, their busiuess amounting to $100,000.

EAST & WEST BRIDGEWATER, 25 miles from Boston, 42½ from Newport, a country station on the Old Colony & Newport Railroad. The village of West Bridgewater is located one mile from the depot. (See East Bridgewater.)

EAST BRAINTREE, about 12 miles from Boston, on the South Shore Railroad. In the town of Braintree, a country station.

EAST BREWSTER, flag station, situated 91 miles from Boston, and 2 from Orleans, on the Cape Cod Central Railroad.

EAST BRIDGEWATER, 25 miles from Bostou and 42¼ from Newport, a village on the Abington and Bridgewater Branch Railroad, a branch of the Old Colouy Railroad running from South Abington to Bridgewater. The village containing 3 churches and the following manufactories:

WM. VINTON, manufacturer of shoes, established business 1851, occupying a small building situated on what was known as the "School house lot." He built his present building about the year 1856. It is a fine 2 story wood building 30x40 feet, situated on Depot street, near the Railroad Station. He employs about 20 hands, and manufactures a fine quality of shoes.

FRANKLIN EDSON, manufacturer of boots and shoes, established business here about the year 1861. He occupies a 2 story wooden building about 50x30, together with basement of the "Academy building." He employs about 20 hands.

THE DEAN & PERRY Foundry and Machine shop was started here Sept. 1, 1868. (Mr. Joshua Dean was formerly foreman for Wm. E. Bart of Keith's Station.) This firm now occupy the works formerly used by the Old Colony Iron company, consisting of 3 buildings. They employ 18 men. Their machinery is driven by a steam engine of 10 horse power, manufactured by the Atlantic works of Boston, Mass.

THE EAST BRIDGEWATER IRON CO. was built in 1837, and consists of a rolling mill, with addition, 150x75 feet. Their motive power is received from 2 water wheels; one 75 horse, the other 20 horse power. They make in this building roll nail plate, shovel and back strip plate, and tack plate. They have also a nail factory, 60x35 feet, with L, for the manufacture of cut nails, chuck and boat nails. One forge for making charcoal blowers, running 2 fires. The power for this building is furnished by a 20 horse engine to drive their hammer, and 1 of 10 horse power to blow the fires. This establishment is situated on the Matfield river, where they have 17½ feet fall. They employ 60 men, and produce about 25,000 chuck nails per year, on an average, and about 500 tons tack plate. The works are located about ¼ of a mile from the depot, on the Old Colony & Newport Railroad.

EAST BROOKFIELD is situated on the Five-mile river, which empties into the Chicopee, 64 miles from Boston, 136 from Albany, on the Boston and Albany Railroad. It contains one church, and a population of about 500.

THE BROOKFIELD MANUFACTURING COMPANY commenced business in 1865, for the manufacture of blue denims. The business was established in 1850 by Wright & Whitman. Their factory building is 4 stories, 75x40 feet; repair shop, 20x35 feet, 2 stories; dry house, 50x30 feet, 2 stories; cotton house, 50x30 feet, 2 stories; and office, 25x16, 1 story. They employ 75 hands, running 60 looms, and turning out 2,500 yards of cloth per day. The machinery is driven by a 75 horse power Turbine wheel. For heating purposes they use a flue boiler.

JESSE MOULTON commeneed the manufacture of castings for machinery, &c., in 1845. He occupies a building 75x40 feet, 1 story, and a warehouse 40x30 feet, 2 stories. He employs 10 hands.

GEORGE FORBES & Co., manufacturers of carriage wheels, commenced business in 1854. The business was established in 1843 by S. G. Reid. The building is 74x40 feet, 4 stories. The machinery is driven by a 60 horse power breast wheel, 16x15, under 15 feet fall. They employ 20 hands, turning out 10 set per day. They have in connection with their works a dry house, 16x20 feet, 1½ stories, and 4 store houses, 160x30 feet, 1 story; 60x25 feet, 2 stories; 40x50 feet, 2 stories; and 60x40 feet, 2 stories, respectively. In the same building we find:

J. W. VAUGHN, who commeuced business in 1860, and occupies the first floor. He manufactures carriage spokes, having in use 3 machines for turning which produce 1,000 spokes per day. He employs 7 hands.

HOBB BROTHERS, who have a room in the fourth story, commenced busiuess in 1867. They manufacture "Curtis' Improved Revolve, Sole Dieing and Cutting Machine," and do a general machinist business, employing 4 hands.

LINCOLN & AYRES commenced the manufacture of wire goods in 1832. They occupy 2 buildings, 60x30 and 24x 24 feet respectively, employ 25 persons and do a business

amounting to from $25,000 to $40,000 annually. The works are situated at Oakham, reached from the above depot.

JOHN GILMAN commenced business in 1867. Their buildings comprise a factory 30x80 feet, 4 stories, dye house 18x 20 feet, picker room 16x24 feet. He runs 1,300 spindles 30 looms, consuming 300 lbs. of cotton and producing 900 yards daily. Their machinery is driven by a 5½ feet water wheel. The factory is located on Chicopee river, having a fall of 8½ feet. Their agents in Boston are J. S. & E. Wright & Co.

AT NORTH BROOKFIELD, reached from this station, are the following manufacturing establishments:

RICHARDSON, KNIGHT & PEABODY commenced business January 1st, 1869, for the manufacture of boots and shoes. They occupy a 4 story building, 36x84 ft., employ 75 hands and produce 300 pairs daily. Amount of business yearly, $200,000. J. A. Cunningham, Agent.

H. H. SPARKS, manufacturer of superior calf pocket books and wallets, commenced business in the spring of 1849. He occupies a 2 story building, 47x24 feet, with basement, and employs, when business is brisk, about 75 hands, and does a business of about $60,000 a year.

EDMANDS, DUNCAN & HURLBUT, manufacturers of boots and shoes. The business was established under the firm of S. M. Edmands & Co., in the year 1850. The size of their building is 64x40 feet. They employ 100 hands, producing 500 pairs boots and daily, and about 140,000 annually. Their establishment is situated 4 miles from either Brookfield, East Brookfield or West Brookfield stations.

EAST DOUGLAS, situated 46 miles from Boston and 24 from Southbridge, on the Boston, Hartford & Erie Railroad; a village of about 600 inhabitants, containing 2 churches. The principal business of this village is the manufacturing of axes, which is very extensive. (See Douglas.)

EAST FREETOWN, 9 miles from New Bedford, a country station, on the New Bedford & Taunton Railroad.

EAST HAMPTON, situated on Manham river, a stream which rises in the mountains, flowing on the outskirts of the village and finally mingles its waters with the Connecticut at Oxbow, or Mount Tom station.

The village is situated 65 miles from New Haven, on the New Haven & Northampton Railroad. It contains about 4,000 inhabitants, has 4 churches and 1 bank. In 1868, the town built a fine hall for use of the town offices, &c.

The manufacturing consists of buttons, cotton yarn, elastic suspenders, vulcanized rubber, rubber thread and steam pumps. The prosperity of Easthampton is due, to a large extent, to the energy and enterprise of Hon. Samuel Williston, who is interested in most of the companies in the place.

Williston Seminary, located here, was founded by the munificence of Hon. Samuel Williston. It was first opened for the reception of pupils in December, 1841, and has since enjoyed uninterrupted prosperity. Additions have been made from time to time by the founder, to its buildings, apparatus and funds, until the whole amount of donations, including $50,000 for the new dormitory recently completed, has reached the sum of $225,000.

EASTHAMPTON RUBBER THREAD CO. Incorporated 1864, with a capital of $100,000. H. G. Knight, President; Seth Warner, Treasurer;—manufacturers of rubber thread, used by all manufacturers in woven elastic goods. They occupy the 1st and 3d stories of a 100x50 three story building—wing 60x25, 1 story—used for thread cutting room; L 30x 50, 2 stories. Office building, 60 x 35, 2 stories, which is also used by the Glendale Elastic Fabric Co. for office, and the 2d story for store room; and by the Easthampton Steam Pump and Engine Co.

THE EASTHAMPTON RUBBER THREAD COMPANY'S works are driven by a steam engine with 24 inch cylinder, four ft. stroke, making 57 revolutions per minute, made by the Washington Iron Works, of Newburg, N. Y.; steam furnished by two return drop tubular boilers. They employ 40 hands.

THE GLENDALE ELASTIC FABRIC CO. was incorporated in 1867; capital $150,000. E. H. Sawyer, president; H. G. Knight, treasurer, and E. Thomas Sawyer, agent; for the manufacture of rubber elastic goods, making a speciality of gusset web; they being the only company in the country who make this last mentioned article. The business was established in 1860 by Messrs. Sawyer, Knight & Williston.

They employ 125 hands, running 70 looms. The motive power is furnished from a 100 horse power turbine wheel. They also have another mill about two miles distant, where they manufacture their own cords and braids, of different sizes and various colors. At this mill they run 100 braiding machines, employ 70 hands, turning out 3,000 gross of cords and braids, and 40,000 yards of web per month. Power from a turbine wheel 65 horse power.

THE EASTHAMPTON PUMP AND ENGINE CO. commenced business in 1869, and manufacture steam pumps. They occupy a building 40x125 feet, employ 22 hands, and produce four steam pumps per week.

NATIONAL BUTTON CO. Established by Samuel Williston, in 1860. The buildings occupied are numerous, covered with slate. They employ 16 men and 125 girls, and manufacture cloth covered buttons. Produce 1,500 gross per day, and doing business of about $200,000 per annum. The machinery is driven by a 15 horse power water wheel, under 20 feet fall; located on Rum brook. Agents, Williston, Knight & Co., 84 and 86 Chambers street, New York.

GEO. L. MANCHESTER commenced the business of gas pipe fitting in 1864. He occupies a 2 story building, employs from 3 to 10 hands, and does a business of about $25,000 per year. He does a large business in the piping of manufacturing establishments surrounding, of which there are many. Mr. Manchester is a graduate of the Providence Steam and Gas Pipe Co., of Providence; R. I., to which he owes much of his success.

EAST HOLLISTON, 25 miles from Boston, and 27 from Worcester, a station in the town of Holliston, on the Milford Branch Railroad.

HARRIMAN & LELAND occupy a 3 story wooden building, 32x32 feet, for the manufacture of boots. They commenced business in 1858, employ 30 hands, turn out 250 cases of boots per month, and consume 750 sides of leather.

STETSON & TALBOT occupy two 2 story wooden buildings, 23x46 feet and 20x60 feet respectively, located on Washington street, for the manufacture of shoe nails and tacks of every description. They commenced business January 1, 1866, employ 9 hands, turn out 12 tons of nails per month, and consume 12 tons of iron and zinc. Their machinery is driven by an upright engine of 5 horse power, supplied with steam from a flue boiler 16 feet long, 42 inches in diameter. They also use a breast water wheel, 11 feet square, and do business amounting to $30,000 per year.

EAST LEXINGTON, 9 miles from Boston and 2 from Lexington, a flag station on the Arlington and Lexington Railroad.

WEST MALDEN, 5½ miles from Boston and 6½ from Lynn. A village of 793 inhabitants on the Saugus Branch of the Eastern Railroad. There are 192 children attending school and 197 voters.

EAST MEDWAY, 22 miles from Boston, 10 from Woonsocket and 31 from Providence, a village containing one church and about 200 inhabitants on the Woonsocket Division of the Boston, Hartford and Erie Railroad on the Charles River.

EASTON, 24¼ miles from Boston, 43¼ from Newport, a small village, containing two churches, on the Old Colony and Newport Railroad.

FURNACE VILLAGE (Easton) is situated in the westerly part of the town, between the Old Colony and Newport Railway and the Taunton Branch Railroad, about 2 miles from the Easton station on the first-named road, and about 4 miles from Norton station of the Taunton Branch. A blast furnace was started here about 1770 by John Brown, of Providence. During the War of Independence cannon were cast here. The old building in which the cannon were bored stood until 1824. The establishment, after changing owners several times, was bought by Shepard Leech in 1807. Mr. Leech was one of the most extensive foundrymen in the State, he running some four or five blast furnaces in different parts of Massachusetts. The castings for the first cotton machinery made in this country were cast here, as well as all of the main gearing, &c., for the first cotton factories. In 1835 the establishment came into the hands of the present owner, Lincoln Drake, who has run the foundry most of the time since. The last blast in the blast furnace was made in 1863, it being run since then as a cupola furnace. The buildings consist of a foundry building, 187x36 feet, divided into a moulding shop, 100x36., a cleaning room and store room, 52x36, and wheel house and room for grinders, 35x36; also a carpenter's and blacksmith's shop, 40x24, machine shop, 40x20 feet. From 1½ to 2½ tons of iron are melted here per day, and from 16 to 24 hands are employed. The castings made are for light machinery, schoolhouse furniture, and light castings of all descriptions. The machinery is driven by water power. In 1836 Lincoln Drake established a malleable iron foundry, which is now run by Daniel Belcher.

EAST RANDOLPH, is situated 15 miles from Boston, 52¼ from Newport. The village is one mile east from the depot and contains two churches. The inhabitants are engaged in the manufacture of boots and shoes.

WHITCOMB & PAINE, occupy a 2 story wooden building 60x30 feet, located on Franklin street, for the manufacture of boots. They commenced business in 1848, have 50 employees, turn out 900 pairs of boots per week, and do business to the amount of $150,000 per annum. They have an office and salesroom at No. 65 Hanover street, Boston.

EAST SALISBURY, 38 miles from Boston and 18 from Portsmouth. A country station in the town of Salisbury on the Eastern Railroad; the Amesbury Branch leaves the main branch here. The town of Salisbury was granted in 1638 by the name of Merrimac. The year following it was incorporated by the name of Colchester and in 1640 assumed by direction of the then general court, the name of Salisbury. It is 7x3 miles in extent, and is bounded southerly by the river Merrimac, westerly by Powow river, which divides it from Amesbury, northerly by the New Hampshire line. There are two considerable villages in Salisbury, the largest is at the westerly part of the town upon Powow river at the head of tide water. The village is divided by said river into two parts, one is Salisbury and the other is Amesbury. The other is pleasantly situated on the bank of the Merrimac and is called Salisbury Point. A village of 400 inhabitants. There are two other little villages in the town. Salisbury Plains and Ring's Island. There is in the town a population of 3,609, 719 dwelling houses, 850 families, 7 churches, as follows: 2 Baptists, 2 Methodists, 1 Congregational and 2 Orthodox; 10 schools; No. of male inhabitants 1,658, females 1957; No. of voters 887; personal property, $527,400; real estate, 1,763,000; rate of taxation, $1.13 on $1,000. There is one bank called the Powow National, capital $100,000; the town covers 10,000 acres of land.

The representative manufactories in the town and at the village of Salisbury, are as follows:

SETH CLARK & Co. occupy a 3 story wooden building 125x38 feet, and a store house 40x38 feet and another 2 stories 25x28 feet, located on Elm street, for the manufacture of light carriages and sleighs. They commenced business in 1860, employ 25 hands and turn out annually 275 carriages and 100 sleighs. They consume $4,000 worth of iron and 30,000 feet of lumber per year, doing business to the amount of $45,000.

BENNETT & CLARK, occupy a 3 story wooden building 38 x80 feet, located on Elm street, for the manufacture of carriages and sleighs. They commenced business in 1866, employ 30 hands, turn out 250 carriages and 100 sleighs per year, and do business amounting to $25,000.

CHESWELL & BOARDMAN, occupy a 2 story wooden building 20x50 feet, a store house 14x18 feet and a blacksmith shop 137x25 feet, located on Market street, where they employ 15 hands for the manufacture of carriages. They commenced business in 1867, and turned out 200 carriages per year, consuming $1,500 worth of iron and 5,000 feet of lumber, doing business of $20,000 per annum.

ENOCH W. OSGOOD, occupies a 2 story wooden building 40x40 feet with L 25x25 feet, located on Elm street, for the manufacture of machinery and tools. He commenced business in 1852, and employs 3 hands. His machinery is driven by a steam engine of 4 horse power furnished with steam from upright tubular boiler built at East Boston. He does a business of $3,000 per annum.

GALE & MORRILL, occupy a 3 story wooden building 50x 35 feet and another 2 stories 35x30 feet, located on Elm street, for the manufacture of carriages and sleighs. They commenced business in March 1868, employ 18 hands and turn out 150 carriages and 75 sleighs per year. They consume $4,000 worth of iron and 30,000 feet of lumber and do business of $30,000 per annum.

G. H. & C.W. PATTEN occupy a 3 story wooden building, 60x30 feet, located on Market street, for the manufacture of light carriages and sleighs. They commenced business in 1866, and employ 20 hands. They turn out 200 carriages and from 65 to 100 sleighs yearly, consuming 15,000 feet of wood, and doing a business of $25,000.

W. F. SARGENT occupies a 2 story wooden building, 30x30 feet, and a blacksmith's shop, 2 stories, 25x25 feet, located in the rear of Market street, for the manufacture of

carriages and sleighs. He commenced business in 1868, employs 12 hands, turns out 200 carriages, and consumes about $3,000 worth of iron per year.

D. & C. W. Bailey occupy a 2 story wooden building, 30x50 feet, also 1 floor of a 2 story building, 45x45 feet, located on Elm street, for the manufacture of carriages and sleighs. They commenced business in 1867, employ 12 hands, and consume $2,000 worth of iron and 5,000 feet of hard wood per year, turning out 150 carriages and 25 sleighs, and do a business of $20.000 per annum.

E. Morrell occupies a 3 story wooden building, 36x60 feet, one 22x32 feet, one 27x40 feet, and another 20x30 feet, located on Main street, Salisbury Point, one mile from Amesbury mills. for the manufacture of carriages and sleighs of every description. He commenced business in 1864, and employs 25 hands. He turns out 300 carriages and 50 sleighs, consuming 12 tons of iron and 15.000 feet of ash and white wood per year, doing business of $43,000.

EAST SANDWICH, a flag station, situated about 1 mile between Sandwich and West Barnstable, on the Cape Cod Railroad, containing about 50 inhabitants.

EAST SAUGUS, 2 miles from Lynn, and 11 from Boston, a village in the town of Saugus, on the Saugus Branch of the Eastern Railroad, contains 300 inhabitants and 1 church.

S. N. Hussey occupies the basement of a 2 story wooden building, 50x30 feet, located on Boston street, where he employs 25 hands in the manufacture of ladies', misses', and children's boots and shoes. Commenced business 1868, and turns out 20 cases per week (60 pairs per case); doing business of $4,000 per annum.

J. B. Calley & Sons occupy 1 floor of a 4 story wood building, 44x44 feet, located on Boston street, where they employ 30 hands in the manufacture of ladies', misses', and children's boots and shoes. They commenced business in June, 1866, and turn out from 500 to 600 cases of boots and shoes per annum.

Albert Hitchings occupies a 2 story wooden building, 18x40 feet, located on Boston street, for the manufacture of ladies' boots and shoes. He commenced business in 1845, employs from 40 to 50 hands, and turns out 500 pairs per week, doing business of from $20,000 to $30,000 per annum.

C. W. Newhall, occupies two floors of a 2 story brick building 44x22 feet, located on Boston street, where he employs 35 hands in the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1853, and turns out 40,000 pairs of boots and shoes per year, doing business of $75,000.

D. S. Newhall, occupies a 2 story wooden building 50x 30 feet, located on Boston street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1865, employs 50 hands, turns out 120 pair of boots and shoes per day and does business amount to $60,000 per annum.

Harman, Hall & Co., occupy a 2 story brick building 44x22 feet and a 3 story wooden building 30x25 feet, located on Boston street, for the manufacture of ladies,' misses' and childrens boots and shoes. They commenced business in May 1867, and employ 50 hands. They consume 4,800 feet of upper leather and 1,800 lbs. of sole leather per week, producing 2,400 pairs of boots and shoes per week and do business of $150,000 per annum.

John Putnam occupies a 2 story wooden building, 18x41 feet, located on Boston street, for the manufacture of ladies' boots, slippers, and buskins. He commenced business in 1843, employs 12 hands, and turns out 1,000 pairs per month, doing business of $9,000 per annum.

George Oliver occupies 1 floor of a 2 story brick building, 45x48 feet, located on Boston street, where he employs 40 hands in the manufacture of ladies', misses', and children's boots and shoes. He commenced business in 1856, and turns out from 12 to 15 cases per week, doing business amounting to $40,000 per annum.

R. A. Johnson occupies a 2 story wooden building, 40x28 feet, located on Boston street, for the manufacture of ladies', misses', and children's boots and shoes. He commenced business in 1862, and has 60 employees. He runs 8 stitching machines, and turns out 180 pairs of boots per day.

Nelson Raddin occupies 2 floors of a 3 story wooden building, located on Boston street, for the manufacture of ladies', misses', and children's boots and shoes. He commenced business in 1863, employs 20 hands, and turns out $30,000 worth of boots and shoes per year.

A. Clarke Newhall occupies the lower floor of a two story wooden building 50x30 feet, located on Boston street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in June, 1863; employs 50 hands, and turns out 40 cases of boots and shoes per week.

Raddin, Newhall & Co. occupy a 3 story wooden building 24x56 ft. with an ell, two stories, 24x30 feet, located on Boston street, for the manufacture of ladies', misses' and children's boots and shoes. The business was commenced by W. H. Raddin in 1858, and by the present firm in Nov. 1868. They employ 100 hands, and turn out 2,000 cases per year, doing business of $175,000.

W. F. Hitchings occupies the lower floor of a two story wooden building 18x28 feet, located on Main street, Saugus Centre, Mass., for the manufacture of ladies', misses' and children's slippers. He commenced business in 1866, and employs 25 hands. He turns out 300 cases of slippers per year, (60 pairs per case); consuming 15,000 feet of goat skin, 4,500 lbs. of sole leather, and 300 lbs. of stiffenings per year; doing business of $175,000.

EAST STOUGHTON, 16¾ miles from Boston and 50½ miles from Newport on the O. C. & N. R. R. The village of Stoughton is one mile west from the station.

EAST TAUNTON (formerly Squawbetty) 6 miles from Middleboro', 4½ from Taunton, a small post village on the Middleboro' and Taunton Railroad.

EAST WEBSTER, 57¾ miles from Boston, 12¼ from Southbridge, a station in Webster village, on the Boston, Hartford & Erie Railroad.

EAST WEYMOUTH, 15 miles S. S. E. of Boston, a village on the South Shore Railroad.

The Weymouth Iron Co. was incorporated in 1836 with the following officers. President, Isaac Pratt, Jr., Brighton, Mass.; Treasurer and Agent, N. Stetson, Esq., Bridgewater, Mass. This company employs 250 hands and does a

business of from $550,000 to $600,000 per year. Capital invested $150,000. These works contain 6 double puddling furnaces, 5 heating furnaces, 90 nail machines and 2 trains of rolls for bar plates. Power is furnished these works by 4 steam engines, "Furgeson's patent," one of 350 horse power and the other 10 to 12 horse power, also 6 water wheels, over shot and breast. Connected with this rolling mill are 4 nail factories, one at the mill, one near the Railroad depot, one in the vicinity of the mill and one in Hingham, a mile distant from the mill. The mill is located ¾ of mile from navigation on Weymouth Bank river. Iron and coal are transported this distance in wagons and carts. Large vessels unload about 4 miles below and cargoes are sent up in lighters. In the mill there is an over shot water wheel 40 feet diameter and 13 feet bucket for the puddle and bar rolls and squeezer and an upright beam engine 35 inch steam cylinder and 6 feet stroke, calculated at 350 horse power for bloom and nail rolls. This engine can also be connected with the nail factory machinery which is generally driven by water wheels. This company consume 1,800 tons of ore and 8,000 tons of coal per year and produce on an average 5,500 tons of nail and spikes.

M. C. Dizer & Co., manufacturers of boots, established business here about the year 1848. The machinery of this establishment is driven by a steam engine of 8 horse power manufactured by Messrs. Chubbuck & Sons, of Boston, Mass. This firm employs 100 hands and produce about 25 cases of boots per day. Their salesroom is at No. 112 Pearl street, Boston, Mass.

W. D. Farren manufactures boots and shoes. He established business in 1866, and occupies one building 4 stories 40x64 feet, and employs from 40 to 50 hands. The power is furnished by a steam engine of 50 horse power. This establishment turns out on an average from 40 to 50 cases per week. In connection with the factory Mr. Farren has a salesroom and office at No. 60 Pearl street, Boston.

Vining & Randall, manufacturers of boots, occupy a 3 story wooden building 35x45 feet, located on Main street. This business was established in 1865 by Bates & Vining. In 1868 Mr Randall associated himself with Mr. Vining under the firm name of Vining & Randall. They employ about 40 hands and turn out 1,500 cases of boots per year.

M. D. Canterbury, successor to N. C. Canterbury & Son. The business was established by N. C. Canterbury, Esq., in 1835. In 1860, Mr. M. D. Canterbury associated himself with his father under firm style of N. C. Canterbury & Son. December 1, 1868, the firm was changed to that of M. D. Canterbury, the senior partner withdrawing. Mr. Canterbury employs 75 hands, and turns out 3,000 cases of boots and shoes per year. In this establishment all articles are manufactured by machinery, the power being furnished by a steam engine of 10 horse power made by S. E. Chubbuck & Son, of Boston, Mass. He has a salesroom and office at No. 30 Pearl street, Boston.

J. W. Rodgers, manufacturer of boots, commenced business in 1861. He employs 20 hands, occupies 2 buildings, and has a capacity of producing 50 cases per week.

A. T. French & Co., manufacturers of boots and shoes, established business about the year 1858. They employ 21 hands, and turn out about 100 cases per month, occupying a 3 story wooden building, 30x40 feet.

H. T. Bicknell established business on New street about 1856. He occupies a building 30x40 feet, employs 14 hands, and produces about 15 cases of boots and shoes per week.

Otis H. Randall, manufacturer of boots, commenced business in 1864. He occupies a building 23x30 feet, and employs 12 hands. He has a sample and sales room on Commercial street, corner of Hanover square, Boston.

A. C. Hall commenced the manufacture of boots in 1862. He occupies a 2 story wooden building, 22x30 feet, and employs 10 hands.

Alva Raymond commenced the manufacture of boots, shoes and Congress gaiters in 1820. He occupies a building 22x48 feet, employs about 12 hands, and turns out, on an average, 400 pairs per month.

Elias Richards established business here in 1820. He occupies a building on Commercial street, 80x30 feet, 2 stories, wood, and employs 20 hands. This establishment has the capacity of manufacturing 50 cases per week. Mr. R. is also largely engaged in fire insurance, being Secretary and General Manager of the Weymouth and Braintree Mutual Fire Ins. Co., office 36 Kilby street, Boston. This company was organized in 1833. N. L. White, of Braintree, is President.

E. Hobart, Jr., manufacturer of boots and shoes. The business was established here under the firm of Hobart & French, in 1865. In 1866, Mr. French withdrew. Mr. Hobart employs from 12 to 15 hands, and produces about 10 cases per week.

J. Totman & Son, manufacturers of boots and shoes. This business was established by Mr. Joseph Totman in 1851.. In 1864, Mr. J. R. Totman associated himself with his father, under the firm name of J. Totman & Son. They occupy a building 27 x 21 feet, and produce about $35,000 worth of goods per year.

C. Nash, manufacturer of boots and shoes, commenced business in 1837. He occupies a 2 story wooden building, 18x24 feet, and employs 25 hands. In 1868, this establishment manufactured about 1,100 cases.

EAST WOBURN, situated 9¼ miles from Boston, 45½ from Wilton and 16½ from Lowell, on the Boston and Lowell Railroad, but more on the Stoneham Branch, which diverges from the main road about one mile north of Winchester. The village contains about 400 inhabitants and one church.

Henshaw & Co. In 1837, the Fulton Hardware Manufacturing Co. commenced the manufacture of all kinds of saws. In 1860 Henshaw & Co. succeeded to the business and which they have conducted very successfully. They occupy 2 one story buildings built of brick, 60x70, and 20x20, situated on Railroad st. near the Stoneham Branch Road. They employ 12 hands, their machinery consisting of 2 grinding machines, 2 stones, 4 presses, 3 pairs shears and polishing wheels, driven by 2 Hazleton wheels 18 in., under 12 ft. fall, and a 12 horse engine made by Allen & Endicott. The steam is furnished from a flue boiler, made by Tetlow, of East Boston. This firm consume 20 tons steel annually. Office and salesroom, No. 31 Exchange street, Boston.

Wm. Totman & Co., manufacturers of ladies', misses' and children's shoes. This firm commenced business in 1860, on Central street, as successors of Wm. Totman, who established the business in 1850. They occupy a building 24x30, two stories, employ 25 hands, producing 200 pairs of shoes per week. This firm do considerable business in custom work; their other goods are made for the New England trade.

Fry & Thompson commenced business in 1866, for the manufacture of lacing, belt and picker leathers. Works are all situated on Mill street, near Washington, and consist of two buildings, 50x30 and 40x25, three stories. The number of vats are 33. They consume 750 lbs. gambia, 20 gallons oil, and 150 lbs. tallow per week. Tanning, on an av-

AMERICAN TACK CO.,

——Manufacturers of——

Copper, Swedes and Iron Tacks,

BRUSH; LACE AND GIMP TACKS;

Leathered, Tinned, and Iron Carpet Tacks; Finishing, Black, and Tinned Trunk Nails; Hungarian and Cigar Box Nails;

COPPER & IRON BOAT NAILS;

ZINC, COPPER, STEEL AND IRON SHOE NAILS; SECOND AND THIRD FINE NAILS;

BRADS, PATENT BRADS, &C., &C.,

Manufactory at

FAIRHAVEN, MASS.

SALESROOM, 48 BEEKMAN STREET, NEW YORK.

erage, 600 Calcutta hides per month. The motive power is furnished from a 12 horse Blake wheel.

GILLIS. A country station of 40 inhabitants, situated 13 miles from Boston and 57 from Southbridge on the Boston, Hartford & Erie Railroad.

GIRVING, 42 miles from Fitchburg, 92 from Boston, and 14 from Greenfield. A village of about 400 inhabitants, containing 1 church. It is situated on the Vermont & Massachusetts Railroad, in the town of Erving which was incorporated April 17th, 1838.

N. & T. W. RANKIN are manufacturers of wood-seat chairs. They occupy a building 80x40 feet, situated about 50 rods from the depot. They employ 25 hands and produce 125,000 chairs per year. This firm has been in business since 1865.

GIVERETT'S STATION, ½ mile from South Dedham depot, being in the same village as a freight station on the Boston, Hartford & Erie Railroad.

FAIRHAVEN is situated 1 mile from New Bedford, and 60 miles from Boston, on the Fairhaven Branch Railroad. This pleasant town was taken from New Bedford, in 1812. It lies across Acushnett river, about a mile east of New Bedford, and is united to it by a bridge 3,960 feet in length, and is associated with it in many of its enterprises. It was first settled in 1764. During the year ending April 1st, 1867, the value of whale oil and bone imported into this place was $322,272. The number of hands employed in the fishery was 945, and the capital invested $957,000.

The population, in 1865, was 2,548. Amount of taxable property, $1,661,750, and the number of polls, 714. The number of whaling vessels is 12, including barks, brigs and schooners. There is 1 bank situated here, "The Fairhaven National," capital $240,000, par value 80.00; also 1 savings bank.

THE AMERICAN TACK CO., was organized in May, 1867. Capital $75,000. Charles E. Brigham, President, J. Arthur Beauvais, Treasurer. C. D. Hunt, resident agent. This company are successors to the American Nail Machine Company, who established the business in 1864. The works are located on Fort street, in the south part of the village, bordering on the harbor. The building is 170x40 feet, 3 stories, built of stone. They employ 75 persons, consume 55 tons of iron per month and produce $15,000 worth of tacks and nails, using 60 tack and nail machines. A 60 horse engine supplies the motive power made by the Putnum machine company of Fitchburg, Mass. The company report that this engine is in their opinion one of the best ever built in this country. Office in Boston, 137 Congress street. Office in New York, 48 Beekman street, Wm. S. Guerineau, selling agent.

THE BOSTON AND FAIRHAVEN IRON WORKS was incorporated in 1863. Capital $50,000. Reuben Nye, President, Job C. Tripp, Treasurer, B. T. Leonard, Agent, located on Laurel street, corner Union. The main building is 120x120 1 story, used as a foundry, machine shop 40x72, 2 stories and attic with L 22x50, 1 story, boiler and flask house 20x 30 feet, 2 stories. They employ 60 persons, manufacturing

machinery and castings, a 40 horse engine supplies the power. They melt 2½ tons of iron daily, doing a business of $100,000 annually.

THE EMPIRE ROCK OIL CO. not in operation.

FALL RIVER, 53¼ miles from Boston and 14 from Newport. A manufacturing city on the Old Colony & Newport Railroad and at the terminus of the Fall River Railroad from Providence via. Warren. The city is situated on Mount Hope Bay near the mouth of the Taunton River. A steamboat runs from Providence daily. It is built on rising ground which has a very steep ascent from the waters edge to a full quarter of a mile back. Previous to the year 1803 the town was a part of Freetown, after which it was incorporated a separate town under the name of Troy, and so remained until the year 1834 when the name was changed to Fall River, after a river of that name which flows through the centre of the city and has its rise in Watuppa pond, which latter is 11 miles long and 1 mile wide; the river has a descent of 139 feet. The volume of water is constant, not liable to excess and of sufficient power for the largest manufactories. The harbor on Taunton river is safe and easy of access, and of sufficient depth of water for the largest ships. By the census of 1865 there was found to be upwards of 21,700 inhabitants, there being at the present time 23,203; there are 2,265 dwelling houses, 3,489 families, 3,204 legal voters and 915 naturalized voters. The valuation of property in May, 1868, was as follows: Real estate, $9,818,518; personal, $8,100,674, amounting to $17,919,192; polls 6,002; rate of taxation $14 per $1,000; amount of taxation $262,872 74. The largest amount of corporation valuation is $1,256,750, giving a tax of $17,594 50. There are 7 national banks and 3 savings banks, as follows: First National Bank, incorporated during the year 1864, Jan. 23d, having a capital of $40,000 with a surplus of $50,000; President, John S. Brayton.

Second National Bank has a capital of $100,000. S. Angier Chace, president. Fall River National Bank has a capital of $100,000. Richard Borden, president. Metacomet Bank, capital $600,000. Jefferson Borden, president; A. S. Tripp, cashier. Massasoit National Bank, capital $200,000. Charles P. Stickney, president; Leander Borden, cashier. Pocasset National Bank was incorporated May, 1854, having a capital of $200,000. Samuel Hathaway, president; E. E. Hathaway, cashier. National Union Bank, capital $200,000. Jesse Eddy, president; D. A. Chapin, cashier.

The Savings Banks are, Fall River, which was incorporated in 1338; number of depositors 5,900; amount of deposits, $2,150,000. J. B. French, president. Fall River Five Cent Savings Bank, incorporated Oct., 1855. Depoists from five cents up are received. S. Angier Chace, president. Amount on deposit, $275,000; number of depositors, 2,400; and Citizens Savings Bank, which was incorported December, 1851. Joseph Osborn, president. The Fire Department consists of three steamers, one hand engine, and one hook and ladder company. There is one high school, four grammer, nine intermediate and six primary schools. Number of churches 17, of various denominations One Freedman's Relief Society; 1 Masonic and 3 Temperance Societies. There is but one public library, which was established during the year 1860, and at the present time contains 5,633 volumes.

In 1868, Fall River had 507,900 spindles in operation, 11,590 looms; hands employed, 6,759; consumed 23,273,000 pounds of cotton, wool and jute; 32,482 tons of coal; 47,990 gallons of oil; 636,600 pounds of starch, producing 114,364,000 yard of cotton and woolen goods. Pay roll of the corporations $200,000 per month.

THE AMERICAN PRINT WORKS commenced operations in 1834; capital stock $360,000; print 20,000,000 yards per annum; 2,000,000 pounds of madder and garancine are annually consumed; $385,000 dye-stuffs. Employ 500 persons; consume 15,000 tons of coal; 4 engines, 610 horse power; 1 turbine, 4 feet 6 inch diameter, manufactured by Kilburn, Lincoln & Co.

The statistics of the BAY STATE PRINT WORKS are included in the above account.

THE FALL RIVER IRON WORKS commenced operations 1822; capital stock $1,000,000; use 15,000 tons of coal; manufacture 1,200,000 pounds of nails per annum. There are 106 nail machines and 24 furnaces. They also manufacture hoops, round, square and flat, iron wire rods, casting, &c. They require 600 workmen. They have an office and ware house at 71 South Water street, Providence, R. I.

EDMUND CHACE, tanner. All kinds of belt leather, card, and tan skins are made by him. He established the business about the year 1835, and occupies a 2½ story wooden building. 70x100 feet. At the present time there is employed 8 hands, who turn out about 3,000 sides of tanned leather per year. An 8 horse engine, with a cylinder boiler, furnishes the motive power.

KILBURN, LINCOLN, & CO.,* manufacture machinery, such as mill gearing, shafting, hydraulic presses, calenders, and mangles, steam engines and machinists' tools, cast iron pipe and heavy castings, but make a speciality of the Fourneyron turbine, to perfect which they have devoted much attention. The senior members of this firm commenced business about 22 years ago on a limited scale, and now are doing a very large business. Their works cover about 2 acres of ground, and comprise a foundry, machine shop, pattern house, and several smaller buildings. The foundry is a stone building, 80 feet square, and well equipped for doing both light and heavy work. The machine shop is also of stone, 160x50 feet, 2 stories high, with an L 80x50 feet. Many tools in the shop have been made by themselves, and are well adapted to doing almost any kind of work. A portion of the shop is 30 feet high, thus giving space for cranes to swing, in order to "handle" heavy work. Their smith's shop is 50x30 feet, and pattern house 30x40 feet. They employ about 100 hands in their business, and consume annually about 700 tons of pig iron. They have facilities for turning out 500 tons of water wheel work, and 300 tons of miscellaneous machinery in the course of the year. The works are driven by one engine of 30 horse power and one of 8 horse power, made by themselves. Their machinery is shipped to all sections of the country, and at the present time they are shipping work to the shores of the Pacific.

WM. M. HAWES & CO. manufacture lathes, planers, boring mills, shaping machines, upright drills, gear, cutting engines, &c. The company was established in 1862, and occupy a 2 story wooden building of about 8,000 square feet. They employ about 35 hands, with the following machinery:—5 planes, 24 lathes, 1 gear cutter, 1 boring mill, 1 trip-hammer, and 2 upright drills. They use an engine of 16 horse power, built by a Rochester firm.

FALL RIVER MANUFACTORY located on Pocasset street, was incorporated in 1813. Commeneed operation in 1815. Capital, $150,000. Dr. Nathan Durfee, President; S. Angier Chace, Treasurer. This mill was burned in 1868, at which time it contained 9,240 spindles, 185 looms, employing 125 persons, producing 1,600,000 yards of cotton cloth, and consuming 260,000 pounds of cotton yearly, manufacturing 64x64 print cloths. They also consumed annually 150 tons of coal, 750 gallons of oil, and 9,400 pounds of starch. The power was furnished by 1 turbine wheel, 7 feet 4 inches in diameter, built by Kilburn, Lincoln & Co., of this city. This

establishment is now being re-built on a much larger scale, having about 25,000 spindles.

Troy Cotton and Woolen Manufacturing Co., located on Troy street, was incorporated in 1814; commenced operations in 1815. Capital, $300,000. Richard Borden, President; Thomas J. Borden, Treasurer. There are 38,736 spindles, and 888 looms. They employ 446 persons, producing 8,800,000 yards of 64 square printing cloths yearly, and consuming 1,500,000 pounds of cotton, 1,800 tons of coal 3,500 gallons of oil, and 50,000 pounds of starch. Two engines of 250 horse power each, and 2 water wheels, supply the power.

Pocasset Manufacturing Co. occupy 2 mills, viz.: Quequechan and Pocasset; for the manufacture of shirtings, print cloths and sheetings. The mills are located on Pocasset st. The company was incorporated in 1822. The capital is $800,000. Samuel Rodman, President; Stephen Davol, Treasurer. The Quequechan mill commenced operations in 1826; the Pocasset mill in 1847. The former contains 16,200 spindles, and the latter 18,048 spindles, making a total of 34,248. They employ 520 persons, run 814 looms, consume 2,080,000 pounds of cotton, 800 tons of coal, 3,400 gallons of oil, 46,000 pounds of starch; producing 6,000,000 yards per annum. The power is furnished by one 160 horse power engine and 6 breast wheels.

Annawan Manufactory located on Pocasset street was incorporated in 1825. Dr. Nathan Durfee, President; Richard B. Borden, Treasurer; commenced operations in 1826. The capital is $160,000. They run 10,056 spindles, 179 looms, employ 125 hands, consume 332,000 pounds of cotton, 180 tons of coal, 900 gallons of oil, 10,000 pounds of starch and produce 1,800,000 yards 64 square, print cloths. The power is furnished by a 7 feet 4 inch turbine wheel built by Kilburn, Lincoln & Co. of this city.

Massasoit Steam Mill, Davol street, was incorporated in 1843, commenced operations in 1845. Dr. Nathan Durfee, President; Charles Durfee, Treasurer and Clerk; capital $200,000. They manufacture 64x64 print cloths, employ 200 persons, consume 650,000 pounds of cotton, 1,500 tons of coal, 1,200 gallons of oil, and 22,000 pounds of starch, producing 3,000,000 yards, yearly. They run 14,448 spindles, and 354 looms. The power is furnished by a 135 horse power engine

Metacomet Mill, Anawan street, commenced operations in 1846; Jefferson Borden, President; Richard Borden, Treasurer, Clerk and Agent. The capital is $300,000. They run 23,808 spindles, 550 looms, employ 305 persons, manufacturing 5,850,000 yards of 64x64 printing cloths. They consume annually 1,053,000 pounds of cotton, 950 tons of coal, 2,700 gallons of oil, and 35,000 pounds of starch. The power is furnished by a 150 horse power engine and a 4 feet 8 inch turbine wheel.

Fall River Print Works, Pocasset street, incorporated and commenced operation in 1848, Andrew Robeson, pres't; Andrew Robeson, Jr., treasurer. Capital $200,000. They run 12,816 spindles, and 306 looms; employ 180 persons; consume 594,000 lbs. of cotton, 950 tons of coal, 1,200 gallons oil, and 15,000 lbs. of starch; producing 2,900,000 yards, 60x64 printing cloths. The power is supplied by an engine of 150 horse power, and three breast wheels 12 feet in diameter.

American Linen Co., Ferry street, was incorporated in 1852, and commenced operations in 1853. Richard Borden, president; Walter Paine, 3d, treasurer. Capital $400,000. They run 86,136 spindles, 2058 looms, employ 1,250 persons, consume 3,640,000 lbs. of cotton, 625,000 lbs. of flax, 7,000 tons of coal, 6,000 gallons of oil, and 75,000 pounds of starch; producing 20,000,000 yards of 64x64 print cloths, and 1,560,000 yards of crash. The power is supplied by 4 engines 300 horse power each, one 500 horse power and one 75 horse power, making a total of 1,775 horse powers.

Watuppa Manufacturing Co., Pocasset street, was incorporated in 1848, and commenced operation in 1846. Andrew Robeson, president; Linden Cook, treasurer. They run 10,968 spindles, 304 looms; employ 175 persons. Consume 468,000 lbs. of cotton, 225 tons of coal, 540 gallons of oil, and 15,000. lbs of starch; producing 2,760,000 yards of 60x64 printing cloths annually. The power is furnished by two breast wheels, 18 feet 4 inches in diameter.

Union Mill Co., Pleasant street, was incorporated in 1859, commencing in 1860; S. Angier Chace, president; Thomas T. Potter, treasurer; capital, $175,000. They run 44,784 spindles, 1,024 looms, employ 630 persons, consume 1,892,000 lbs. of cotton, 2,500 tons of coal, 4,000 gallons of oil, and 56,000 lbs. of starch, producing 10,000,000 yards of printing cloths, 64x64, annually. The power is supplied by 4 engines, with a combined power of 850 horse.

Granite Mills were incorporated in 1863, going into operation in 1864; Wm. Mason, president; Charles O. Shove, treasurer; capital, $415,000. They run 35,328 spindles, 840 looms, employ 425 persons, consume 1,500,000 lbs. of cotton, 2,200 tons of coal, 3,000 gallons of oil, and 53,00 lbs. of starch, producing 9,000,000 yards of 64x64 printing cloths annually. 2 engines, 300 horse power each, supply the power.

Tecumseh Mills, Hartwell street, was incorporated in 1866; commenced operations in 1867; Augustus Chace, president; Isaac Chace, treasurer. They run 20,480 spindles and 480 looms, employ 215 persons, consume 915,000 lbs. of cotton, 1,500 tons of coal, 1,700 gallons of oil, and 28,700 lbs. of starch, producing 5,200,000 yards of 64x64 printing cloths. The power is supplied by 2 engines, 125 horse power each.

Robeson Mills, Hartwell street, were incorporated in 1866; commenced operations in 1867. Samuel Hathaway, President; Linden Cook, Treasurer. Capital, $300,000. They run 12,672 spindles and 288 looms, and employ 130 persons. They consume 468,000 pounds of cotton, 802 tons of coal, 720 gallons of oil, and 18,000 pounds of starch; producing 2,900,000 yards of 64 x 64 printing cloths. A 165 horse power engine supplies the power.

Durfee Mills, Pleasant st., were incorporated in 1866; commenced operations in 1867. B. M. C. Durfee, President; David A. Brayton, Treasurer. Capital, $500,000. They run 40,320 spindles and 960 looms, and employ 457 persons; consume 1,664,000 lbs. of cotton, 2,500 tons of coal, 4,000 gallons of oil, and 59,500 lbs. of starch; producing 10,000,000 yards of 64 x 61 printing cloths. Two engines of 300 horse power supply the power to drive their machinery.

Mount Hope Mill, Bay street, commenced operations in 1867. Richard Borden, President; Jefferson Borden, Treasurer. Capital, $200,000. They run 9,024 spindles, 192 looms, and employ 160 persons; consume 345,000 lbs. of cotton, 9,000 tons of coal, 1,500 gallons of oil and 15,000 lbs. of starch; producing 1,400,000 yards of sheetings 80x84 annually. The power is supplied by an engine of 150 horse power and one 30 ft. breast wheel, 30 feet in diameter.

Davol Mills, Hartwell street, were incorporated in 1867; commenced operations in 1868; Wm. C. Davol, president; Wm. C. Davol, Jr., treasurer; capital, $270,000. They consume 640,000 lbs. of cotton, 900 tons of coal, 780 gallons of oil, 11,000 lbs. of starch, and produce 1,664,000 yards of sheetings, silesias, &c. The power is supplied by one 200 horse power engine. They run 13,312 spindles, 288 looms, and employ 170 persons.

Merchants' Manufacturing Co., situated on Bedford street, incorporated in 1867, commenced operations in 1868; capital, $800,000; James Henry, president; Wm. H. Jennings, treasurer. They run 53,424 spindles, 1,248 looms, and employ 625 persons, consume 2,300,000 lbs. of cotton, 3,500 tons of coal, 4,500 gallons of oil, 70,000 lbs. of starch, and produce 13,500,000 yards of 64x64 printing cloths per annum. The power is supplied by 2 engines, 500 horse power each.

Mechanics' Mills, Davol street, were incorporated in 1868; Thomas J. Borden, president; D. H. Dyer, treasurer; capital, $400,000. They run 25,000 spindles and 600 looms, and employ 265 persons, consume 1,150,000 lbs. of cotton, 1,900 tons of coal, 2,125 gallons of oil, and 36,000 lbs. of starch, producing 6,250,000 yards of 64x64 printing cloths per annum. An engine of 300 horse power supplies the power.

Wamsutta Steam Woolen Mills, Pleasant street, not incorporated, established 1849, capital $200,000; Jesse Eddy & Son proprietors. They run 8 sets of cards, 32 looms, (16 broad and 16 narrow,) 2,756 spindles, employ 128 persons, consume 260,000 pounds of wool, 900 tons of coal, 3,500 gallons of oil, $5,000 worth of silk, and $15,000 worth of drugs, 100,000 teasels and produce 180,000 yards of fine cassimeres annually. A 75 horse power engine supplies the power.

Chace's Mill, Chace street, established in 1845, capital $100,000, not incorporated; Augustus Chace, agent and superintendent. They run 6,156 spindles, and employ 50 persons, consume 800 tons of coal, 687,000 pounds of cotton, 900 gallons of oil, manufacturing thread yarn. A 70 horse power engine and a breast wheel 18 feet in diameter supplies the power.

Wyoming Thread Co., Chace street, business established in 1860, capital $50,000; Augustus Chace, agent. They run 1,344 spindles, employ 75 persons, manufacturing spool cotton.

Niantic Thread Mill, Division street, was established in 1860, capital $60,000; J. M. Davis, Treasurer and Agent. They run 1,344 spindles, employ 78 persons, consume 525 tons of coal, 875 gallons of oil, and 7,000 pounds of starch, manufacturing spool cotton; 2 engines, 30 horse power each, drives their machinery.

Lawton & Estes' Manufactory, Stafford street, commenced business in 1857. They run 1,500 spindles, and employ 25 persons, consume 250,000 pounds of cotton, and 200 gallons of oil, and manufacture wicking, cotton yarn, &c. A 25 feet breast wheel supplies the power.

Farnumsville, 32¾ miles from Providence, 10½ from Worcester, on the Providence & Worcester Railroad, contains 1 church, about 800 inhabitants, and 2 cotton goods manufactories. (See Grafton.)

Alfred Morse occupies a mill about ¼ of a mile from the station, commencing here in 1860, as successor to Wright & Morse, who commenced here in 1845. The mill is 106x45 feet, 4 stories and attic, with L, 30 x 50 feet, 3 stories. He runs 5,300 spindles, and 131 looms; consuming about 800 lbs. of cotton; and producing 3,600 yards of ⅞ sheetings per day, using 29 to 35 yarn. He employs 86 persons. Three turbine wheels furnish the power for the mills; 2 of them built by Stout, Mills & Temple, Ohio; the other by Chase & Sons, Orange, Mass. The mill is located on the Blackstone, the fall being 7 feet. Mr. Morse is also proprietor of a mill at Holden, Mass. (See Worcester.)

E. Fisher & Sons occupy a mill ½ mile West of the station, for the manufacture of light, yard-wide sheetings, commencing here in 1846, as successors to W. A. Fisher. The mill was built in 1832, being on the Blackstone river. It is 104x44 feet, 4 stories, built of brick. It contains 5,000 spindles, and 106 looms; consuming 5,000 pounds of cotton, and producing 24,000 yards of cloth per week. They employ 90 persons. Two Monroe 4 and 5½ feet turbine water wheels furnish the power for the mill, the fall being 11½ feet.

E. Fisher, H. D. Fisher, G. W. Fisher and A. L. Fisher, proprietors. A. L. Fisher, Agent.

Fayville, 27½ miles from Boston, and 31 from Fitchburg, a village on the Boston, Clinton, & Fitchburg Railroad.

Fitchburg is 26 miles north from Worcester, 86 east from Hoosac Tunnel, and 50 west from Boston. The Fitchburg and Worcester, Cheshire, and Massachusetts and Fitchburg Railroads centre here. A large branch of the Nashua and two smaller streams pass through the town, and afford it an extensive and constant water power. Over the Nashua, in the distance of two miles, there are many dams for the accommodation of manufactories. This place is a very flourishing town, and exhibits in a striking manner the effect of water power on the increase, wealth, and enterprise of many of our interior towns. An excellent quarry of granite is located near here. The growth of this place has been very rapid, nearly doubling its population in six years. There are 6 churches, 3 hotels, and a Town Hall. Estimated population, 11,000.

Among the establishments that make Fitchburg famous as a manufacturing place is the works of the Union Machine Co., which was incorporated November, 1867; capital, $50,000; Francis Sheldon, president; G. S. Burbank, treasurer; S. S. Dow, superintendent; G. F. Sabin, secretary. They manufacture machinists' tools, steam engines, Woodworth's planers, circular saw mills, making a speciality of stave, barrel, tub, pail, and slate machinery. They employ 40 persons. Through the politeness of the secretary, Mr. Sabin, we were shown through the establishment, which comprises a building 300x80 feet, 2 stories brick. At this time we found work ordered six months ahead, and the works consequently drive on to meet orders. Large pondrons driving wheels and heavy castings were being finished for different parts of the country. The idea came to us why persons in the far West and South should send orders away up here in the snowy region of the north for machinery. We could come to no other conclusion than that Fitchburg machinery stands second to none the world over. The business of this company for the year 1868 was $150,000.

A. D. Waymoth commenced the manufacture of his patent variety wood turning lathe, wooden toys, &c., in 1849. He occupies a building, 65x25 feet, three stories, and employs 20 persons. A 40 horse power turbine wheel supplies the power, the fall here being 14 feet.

The Fitchburg Lumber Co. was incorporated March, 1868. D. F. McIntire, president; R. L. Goddard, treas'r. Capital $50,000. Their buildings are 40x100 feet, 2 stories, and 60x30 feet, 2 stories respectively. They manufacture doors, sash and blinds. A 200 horse power beam engine supplies the power. The driving wheel of which, is 18 feet in diameter, weighing 11 tons, the largest ever made by the Putnam Machine Co.

BAY STATE MACHINE CO.,

Will manufacture and furnish to order all kinds of

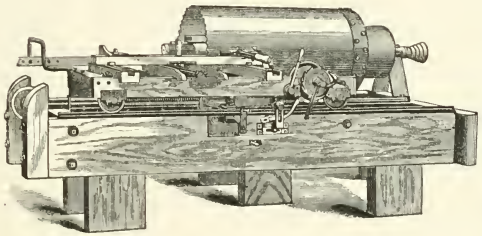
WOOD-WORKING MACHINERY,

PAIL, TUB, IMPROVED KEG, BARREL, SASH, DOOR AND BLIND MACHINERY.

Barrel, Tub and Pail Stave Saws,

FROM 2 IN. TO 5 FT. DIAMETER.

Stave Machinery, Hoop Machinery, the best in the world; Chair Machinery, of all kinds; Daniel's Planing Machines, of all sizes.



THIS MACHINE REPRESENTS OUR

Extra Heavy Size Stave Sawing Machine,

FOR KEROSENE OIL BARREL STAVES.

This is a substantial, well-made Machine, built from entirely new patterns, and is adapted to all kinds of *Hard and Soft Wood Staves.* Our Saws are made from the *Best English Saw Steel*, and we warrant them the best in use.

Price, $650.

—o—

Woodworth's Planing and Matching Machines,

Wood-Turning Lathes, Sawing Machines and Saw Arbors, Horizontal and Upright Bearing Machines, Comb Machinery, Circular Saw Mills, Turbine Water Wheels, of different patterns. Shafting and Mill Work of all descriptions, and Jobbing of all kinds, ☞*Done to Order.*☜

NEWTON'S LANE, - - - - - - - - - - - FITCHBURG, MASS.

Portable and Stationary Steam Engines, from 1 to 500 horse power.

Hoar's Patent Vise, with Off Shot Jaw.

MANUFACTURED BY

NEW ENGLAND VISE CO.,

FITCHBURG, MASS.

Hoar's Patent Vise, with Jaws, available for all kinds of work, being off-set either to the right or left of shank screw. They are a top attachment and can be secured to any level surface.

For holding work on Planers or upright drills they have no equal.

The swivel vise is rotated simply by turning two set-screws on either side of beam, as shown in cut.

Every Vise warranted. The steel Jaws are secured by machine screws, and easily replaced in case of accident.

Hoar's Patent Chuck was awarded the highest premium at the Middlesex Mechanics Fair, held in Lowell, September and October, 1867. Below we copy the judges report entire.

"The best Planer Chuck we have ever seen. The bed-plate bolts on the Planer-table; the Chuck can be turned about on its centre, horizontally; the bed-plate being graduated on its circumference. Exact duplicates of polygonal work can readily be obtained without moving the bed-plate, which is always fast. Another Chuck or Shoe is fitted into this Chuck, one end of which can be raised or lowered to a certain extent, if an inclined plane surface is wanted. Two centres are also fitted into this Chuck, to hold rolls, taps, &c. for fluting. The whole well and strongly made, and easily taken apart for different uses."

Also, HOAR'S PATENT ROTARY COMBINATION CHUCKS FOR PLANERS. ENTIRE ROTARY FANCY VISE FOR JEWELLERS,

Manufactured from White Metal and Malleable Iron, Highly Finished.

Simmonds Manufacturing Co. was incorporated in 1868 as successors to Simmonds Bros. & Co., who established the business at West Fitchburg, in 1864, removing here in 1868. The building is 100x40 feet, four stories, wood, with 2 ells 80x32 brick, and 64x30 wood, one story. They occupy two floor of main building and the ells, manufacturing mowing and reaping, sickles, and planing machine knives. They employ 30 persons, use 50 tons of steel, and 50 of iron, annually. A 60 horse Putnam engine supplies the power. Their business amounts to $75,000 yearly.

The American Ratan Co. was incorporated in July, 1852. Capital $100,800. Moses Wood, president and treasurer; E. F. Bailey, clerk. The buildings occupied, consist of a factory 100x60 feet; store house, 40x60 feet, and five other buildings 100x20 feet. They employ 80 hands, male and female, and manufacture chairs, cane and reeds, producing 15 bales per day. This establishment and that of Cyrus Wakefield, Esq., Wakefield, Mass., are the largest concerns of this kind in the United States. A 30 horse power portable engine, made by the New York Steam Engine Company, of Worcester, Mass., drives their machinery.

Edwin Richardson, manufacturer of all kinds of scythes, hay knives, rag cutters, and ditching knives, commenced business in 1851. He occupies a room containing 10,500 square feet, employs 35 hands and turns out 700 doz. of the above mentioned articles annually. The works are situated on Nashua river. The machinery is driven by 6 water wheels under a fall of 16 feet. His wholesale warehouse is located at No. 33 Lake street, Chicago, Illinois.

A new patent vise, one that will take a foremost rank among others, is manufactured by the New England Vise Co., formerly of West Acton, Mass., removing here in 1868. The company was incorporated in 1868, capital $45,000; N. E. Cutler, President; Charles Hastings, Treasurer; A. T. Arnold, Superintendent. The business was established by Hoar, Hastings & Cutler in 1866, at West Acton. The vise was patented by J. S. Hoar who sold the same to the present company. They occupy one room 40x100 feet in a large building with forges and other rooms attached. They employ 14 persons, and manufacture about 300 vises per month. These vises are an off shot jaw and rotary, 23 different sizes. They also manufacture Hoar's Patent Planer Chuck and Patent Level Jaw attachment, Dodge's patent saw filers vise, clothes line holders, small chilled cast iron anvils, &c. They are about closing bargains for two well known and valuable patented articles which will soon be introduced. A trial of one of the vises of this company was made in our presence, which demonstrated the immense power that they have. A piece of iron 3 feet in length was attached to the regular lever in order to obtain more purchase, consequently greater power. This lever was pulled by two men with all the power they possessed, intending to break the shank of the vise, this they succeeded in doing not without having, however, bending the original lever attached to the vise, nearly 45 degrees, a fact which illustrates the power in this valuable invention.

J. Cushing & Co. have lately remodeled the "Fitchburg Stone Mill" formerly used as a cotton mill and placed therein 3 run of stone with a capacity of 90 bushels per hour, for the manufactory of flour and meal. The building is 40x90 feet, 4 stories above basement. The power is supplied by 4 of Whitney's turbine wheels; the fall here being 11 feet. The diameter of the stone used is 4½ feet. They intend to put in 2 more of run of stone soon.

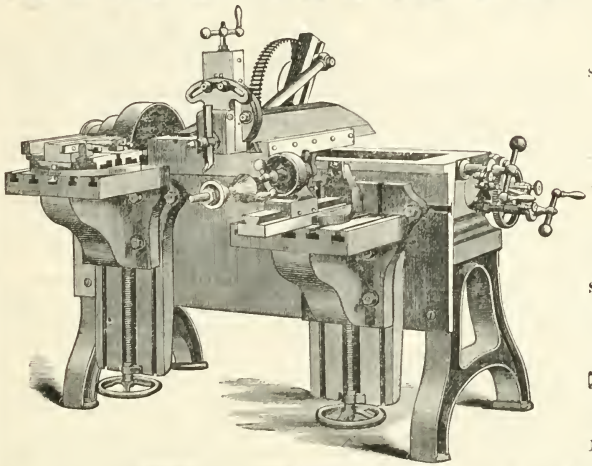
Rollstone Machine Works was incorporated in 1867; capital $24,000. E. T. Miles, President and Treasurer, S. Goodrich, Secretary, James Goodrich, Superintendent. They occupy buildings 70x40 feet, 3 stories with 2 wings 25x20 feet, each 1 story. They employ 25 persons and manufacture as a speciality Wardwell's patent saw bench, band sawing machines, rotary bed planing machines, moulding machines, sash, blind, door, chair and other wood working machines; a 20 horse power Blake's turbine wheel supplies the power, the fall being 14 feet.

The manufacture of barrel, tub, and pail machinery has engaged the attention of many firms here in New England. Among others who make it a speciality is The Bay State Machine Company. They have 2 floors, 30x80 and 30x50 feet respectively. They employ 25 persons, and run one 18 feet bed engine lathe, 14 smaller lathes, 2 upright drills, 2 planers, &c. A breast wheel supplies the power, the fall here being 12 feet. They also manufacture wood-working machinery.

The Fitchburg Machine Co. was incorporated June 1st, 1867; capital $60,000. S. C. Wright, President, J. L. Chapman, Secretary, A. Whitman, Treasurer. This company are successors to C. S. Wright & Co., who established the business in May, 1864. Mr. Chapman the Secretary of

T. L. BARKER & CO.

MACHINISTS,



SAWYER'S BUILDING,

SUMMER STREET,

Fitchburg, Mass.

MANUFACTURERS OF

ENGINE

AND

Hand Lathes,

Shaping Machines,

DYNAMOMETERS,

Olmsted's Friction Clutch Pulley,

SHAFTING,

Mill Work, &c.

T. L. BARKER.] **JOBBING & REPAIRING PROMPTLY ATTENDED TO.** [A. BRIGHAM.

the present company, was a partner of Mr. Wright in the commencement. Their building is substantially built of brick 150x65 feet, 4 stories, with blacksmith shop and engine house attached. They pay particular attention to, and excell in the manufacture of machinists' tools, employing 100 persons in their manufactory. A 25 horse Putnam engine supplies the power. The business of this company has steadily and successfully increased since their commencement, having more than doubled their nominal capital. The working capital being about $150,000. Arrangements are being made for a still larger increase to supply the demand for their tools. They use 3 tons of castings daily and do business annually of $150,000. Wm. L. Chase, 79 Liberty street, New York, agent.

T. L. BARKER & Co. occupy 1 room, 75x60 feet, in a large brick building on Summer street, for the manufacture of engine and hand lathes, shaping machines, and friction clutch pulleys, commencing here in 1868, as successors to C. S. Tolman & Co., who established the business about 1858. They employ 10 persons, and do a business of $20,000 per year. The firm is T. L. Barker and A. Brigham, who were former partners of Mr. Tolman, purchasing his interest in 1868. Being practical men and devoted to business insures in a great measure their future success.

In the same building and on the same floor is C. H. BROWN & Co., occupying a room of the same size for the manufacture of steam engines, commencing here in 1866. They employ 20 persons, produce eighteen engines yearly, and do a business of $75,000. A new manufactory is intended to be built by them during the present year.

LEVI SHERWIN & SON occupy a building, 30x40 feet, 2 stories, with L, 1 story for the manufacture of brackets and bed carvings, commencing here January, 1869. They employ 12 persons, and do a business of $10,000 yearly.

The oldest and most extensive manufacturing company here is the PUTNAM MACHINE CO., which was incorporated in 1858; capital, $40,000, since increased to $160,000. S. W. Putnam, president; B. Snow, Jr., treasurer; L. D. Bartlett, secretary. A new manufactory was built in 1866, located in the centre of the place, on Main street, on a track of land comprising 20 acres, owned by the Company. The main building is 469x90, 1 story, with office and wings attached, making the whole 625 feet in length. The office being 2 stories, all built of brick, besides numerous large and spacious buildings for foundries, machine shops, pattern and storehouses, &c., &c. They employ 250 men manufacturing steam engines, machinists' tools, planers, shafting, &c. A 70 horse engine of their own make supplies the power. They melt 7 tons of iron daily, manufacture all of their brass castings, and have every facility to make a complete establishment. The arrangement of the large building used as a machine shop is peculiarly adapted for economy of time, space, and labor. At regular intervals projects a small wing on either side, one used for setting up the machines after they are made, the other, directly opposite, as an office of the overseer of this department. There are 7 de-

partments and 14 L's, an arrangement which manufacturers will appreciate. A new office building is about being erected, designed by S.W. Putnam, Esq., Jr., a son of the President of the company, who also planned the new building which we have noted. The office will be 70x66 feet, 4 stories, including French roof, built of pressed brick, with stone trimmings; a large public hall will be in the third story, the second for the office, and the first for stores. The intention is to make this building equal to any office building in New England. This company is the parent of several similar establishments that have gone out from it, and which now rival it in producing reliable work, as well as for financial ability.

W. Heywood Chair Co., manufacturers of chairs, occupy buildings 120x40, three stories, 80x40, five stories, 140x40, four stories, respectively with smaller buildings attached. They employ 150 persons, consume over 3,000,000 feet of lumber annually, producing 800 finished chairs daily. A 100 horse power Putnam engine supplies the power. The business was established W. Heywood, who is the head of the firm. Their saw mills and lumber district is at Barton, Vt.

Weston & Place, manufacture weavers reeds and harness. They employ 3 persons, produce 250 reeds per week, and do a business of $10,000 yearly.

H. W. Pitts, occupies a mill 65x30 feet, 3 stories, wood, for the manufacture of carpet twine. He runs about 1200 spindles and consumes 600 pounds of cotton daily. He employs 30 persons. The power is supplied by a Whitney turbine wheel with a fall here of 10 feet.

Fitchburg Woolen Co., W. H. Vose, Agent and Treasurer, occupy a mill 140x38 feet, 4 stories, built of brick, for the manufacture of cassimeres. They run 4 set of woolen machinery, employ 65 persons, consume 170,000 pounds of wool, and produce 120,000 yards of cassimeres annually, a breast wheel supplies the power, the fall here being 11 feet. This mill was started in 1822, for the manufacture of woolen goods, enlarged in 1834 and again in 1861. It has always continued in operation, a fact which is not general with manufacturing concerns through the United States.

A. A. Beckwith & Co. commenced the manufacture of doors, sash and blinds in 1865, being successors to A. A. Beckwith, who died in 1868. They occupy 2 buildings, besides sheds; employ 20 persons; consume 500,000 feet of lumber, and do a business of $50,000 per year. A 25 horse power Putnam Machine Co.'s engine, and a 25 horse power Blake turbine wheel supply the power, the fall being about 12 feet.

Alonzo Davis commenced the manufacture of cane-seat chairs in 1845. In 1855, he erected a brick building, 158x40 feet, 4 stories, with engine room attached, in which is a 50 horse power Corliss engine. He employs 50 persons; consumes 500,000 feet of lumber, and produces 72,000 chairs annually.

E. M. Dickinson & Co. commenced the manufacture of women's shoes in 1864. They employ 60 persons, produce 300 pairs per day, and do business amounting to $100,000 per year.

J. Booth & Co. occupy a building in the west part of the village, for the manufacture of Shetland yarns and braids, commencing here in 1865. The building is 53x30 feet, 3½ stories, with L 45x70 feet, 2 stories, wood. They run 1,034 spindles on frames, and 3,084 braiding spindles, and employ 65 persons. They consume 3,000 pounds of Canada wool yearly, using 2 full sets of combing and drawing frames. The mill is situated on a branch of the Nashua, with a fall of 22⅔ feet.

H. F. Cary commenced the finishing of men's and boys' hats in October, 1868, as successor to R. L. Goddard. The building is 24x50 feet, 2 stories, with bleacheries attached. He employs 15 persons, and produces about 100,000 dozen yearly.

About a year ago the Burleigh Rock Drill Co. began the manufacture of the Burleigh drill. This drill was invented and perfected by Mr. Burleigh, after many years of study and labor. It is of what is known as the letter X shape and possesses two important distinguishing peculiarities: when in use the force of the blow that drives it falls wholly on the drill and piston, no other part of the machinery being affected; the drill revolves with frequency proportionate to the number of blows, and is self-feeding. Five sizes and patterns of this tool are made—for milling, tunneling, quarrying, sub-marine work, &c. One of the smallest drills may be seen in operation at the works; it drills in solid granite a 1½ inch hole at the rate of 4 inches in depth per minute—this being the result of about 300 blows. The drills of this size would feed 30 inches without a change of drill points. The Burleigh drills are driven by steam or condensed air, and can be inclined at any angle. There are now in use 73, including 28 at the Hoosac Tunnel, and others on the Union Pacific Railroad, in the Lake Superior copper mines, &c. The company now employ 30 hands, and expect to turn out 300 drills this year.

The Crawford Mills, owned by C. J. Delenhanty & Co., are two in number, each having three sets of cards. They are run on fancy cassimeres, and turn out 75,000 yards of 6-4 goods per year. The firm employ 100 hands, and their machinery is driven by a Putnam Machine Company engine of 40, and a Corliss of 30 horse power.

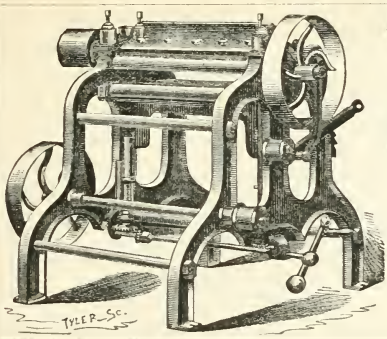
Heywood, Wilson, & Co. have recently finished and taken possession of their fine new foundry, the main building of which is 120x60 feet, and contains two Pevey's patent stacks. They employ 20 hands and will turn out about 500 tons of castings per year. Special attention will be given to machinery castings, which they have facilities for producing of all sizes, from one to 2,000 pounds weight.

The oldest and largest concern in the country engaged in the manufacture of mowing and reaping machine knives and sections, is the Whitman & Miles Manufacturing Co., of West Fitchburg. These works cover about 4 acres of ground and include a main building 100x35 feet, an L 85x30, and a blacksmith shop 140x35. The latter contains 18 trip hammers and the same number of forges. The grinding room, one of the largest in the country, being 100x65 feet, has 20 stones, and 150 stones of 2 tons each are consumed annually. These works give employment to 160 hands, are run night and day, consuming 30 tons of imported steel, per month, and can turn out 130,000 complete sickles annually. This company was established in 1847.

Implements for treating hen-fruit and orchard fruit—that is to say, egg-beaters and apple-parers, are made in immense numbers by Munroe Bros., who employ 20 hands when in full operation. They are the inventors and exclusive manufacturers of the "One Minute Beater," of which thousands are exported annually.

"Toy Mortars" are as popular in their way as tomatoes. These toys are made only by H. J. Hosmer & Co., who turned out 50,000 of them last year, and expect to make 3 times that number in 1869. They employ 15 hands in the manufacture of various wood toys and wood turning generally.

Railroad and machinery castings of brass and composition are made in great variety by Wm. A. Hardy & Co., who also make castings for other purposes to the amount of 40 tons per year. Hardy's well known lining metal is an-



John Humphrey & Co.,

KEENE, N. H.,

MANUFACTURERS OF

Circular Saw Mills, Planing Machines,

And Wood-Working Machinery

Of almost every variety.

SUPERIOR TURBINE WATER WHEELS,

SHAFTING, GEARING AND MILL WORK

Of every description.

(See pages 95, 143 and 300.)

other product of this establishment, which was founded 15 years ago, and now give employment to 8 hands.

(See also South Fitchburg and West Fitchburg.)

FLORENCE, 5 miles from Williamsburg, and 2½ from Northampton, a village in the town of Northampton, on the New Haven and Northampton Railroad. The name was taken from Florence, Italy, so widely known for its silk culture. The place too has the honor of being the pioneer in the preparing and manufacturing of silk in this country, having been started in 1835, by Mr. Whitmarsh, who purchased in all some 400 acres, being nearly all the land on which the village now stands, soon after a company was formed, called the New York and Northampton Silk Company, having a capital of $150,000. The excitement in regard to the manufacture of silk became as great and equalling in blindness the oil speculations of the last few years. The town was settled about 1800, there being but 7 houses here in 1812. The population now is about 2,500. Mill river runs through the village, furnishing most valuable water power. The schools are of a high order. A 2½ story brick school house has been erected, the town voting $2,000 and the balance was furnished by S. L. Hill, Esq.

NONOTUCK SILK CO., occupy 3 buildings in Florence and 3 in Leeds, for the manufacturing of sewing silk and machine twist, the business was established in 1851. They now have 300 employees, turning out 600 lbs. of silk per week.

AMONG the extensive manufactures to be found in this section of Massachusetts, is the well known FLORENCE SEWING MACHINE CO. During the year 1861, this now famous machine, was first introduced. During the first year, the small number of 50 machines were made; and they finding ready sale, it was decided to form a stock company, S. L. Hill, D. G. Littlefield and L. W. Langdon, being the proprietors. The ensuing fall the company was enlarged by the addition of George A. Burr, J. S. Parsons, and S. L. Hall, Jr.; the capital being $125,000. The business still increasing, additional capital was required, and in 1862 the stock was increased to $200,000. Two years later, a building 150 x40 feet, three stories, built of brick, was erected at a cost of $50,000. In 1866, it was decided to increase the capital to $500,000, in order to have every facility for manufacturing the machines fast enough to supply the demand. This year a second building of the same dimensions as the one built in 1864, was erected, and also an extensive foundry. Up to this time the sales had increased almost without a parallel, from 50 machines to about 1,000 per month; at present time, (fall of 1868,) the number is 1,200 per month. The inventor, Leander W. Langdon, has been greatly assisted by S. L. Hill and D. G. Littlefield, in perfecting the machines. There are four principal buildings as follows:—Building No. 1, is built of brick, 4½ stories, 160x48 ft. used for manufacturing iron work, packing and shipping; second building is of brick, 160x48 feet, 4½ stories, and used for manufacturing wood work, cases, &c. Third is two stories, built of brick, 100x40 feet, with wing 80x40 feet, used for manufacturing iron work, machinery, blacksmiths' shop, and annealing room. Building No. 4, joining wing of No. 3, is used for foundry, 80 feet on Chestnut street and 80 feet on Centre street, forming an angle 40 feet wide. The number of employees number about 250 men, making about 1,200 machines per month. The motive power is furnished by two engines 60 horse power each, built by Corliss, Providence, R. I. There are four tubular boilers, 4x16 feet. The company have three new blocks, comprising 24 tenements and a large boarding house, the whole costing $30,000. The pay-roll amounts to about $17,000 per month.

THE FLORENCE MANUFACTURING CO. This company are manufacturing toilet brushes, hand mirrors, and many articles now made of hard vulcanized rubber, out of a material very closely resembling hard rubber. The business was originally started by Littlefield, Parsons & Co. It was organized in July, 1866, with a capital of $100,000. The building now used was erected during the summer of 1866, and is a substantial and fine looking 3-story brick building, being 125 feet long and 40 feet wide. The amount of goods made per week is about 150 doz. mirrors and 100 doz. hand brushes, besides a large amount of ambrotype cases and picture frames. There are about 50 employees. A fine engine of the Corliss pattern of 25 horse power, and 1 tubular boiler, the latter made by Rice, Robbins & Co., Pittsfield, Mass., furnishes motive power and steam for heating the whole building. The expense of building and engine was about $40,000. I. S. Parsons, President; and George A. Burt, Treasurer.

FOREST HILL, 4¼ miles from Boston the Stoughton and Dedham Branch Railroads. The new Dedham branch joins the Boston and Providence railroad here. A few houses only located here.

FORGE VILLAGE, 31 miles from Boston, 21 from Fitchburg and 11 from Lowell is situated on Stony Brook Railroad, and contains about 75 persons.

FORGE VILLAGE HORSE NAIL CO., incorporated in 1862, capital $72,000, J. T. Daly President, A. H. Carryl, Treasurer and manager, S. O. Lumston Secretary. This company manufacture horse nails. Their works are situated near the depot, and consist of a forge shop 40x100 feet, one story, built of iron, containing 50 hammers, driven by an 80 horse power turbine wheel. A smiths shop attached, 25 x30 feet, one story of iron, and machine shop, 30x40 feet, two stories. This shop derives its motive power from a 24 inch turbine wheel with 13 feet head. They also have an iron store house three stories, 28x40 feet, in which is located their office and counting room. They employ 65 hands, and produce about 2,000 pounds of nails per day.

FOXBOROUGH, situated 21½ miles from Boston, and 22 from Providence, on the Boston & Providence Railroad. The village of Foxborough is situated a mile or more from the station. It is expected that a long time will not elapse before the Mansfield & Framingham Railroad will be completed affording this place greater transportation facilities.

H. M. WISWALL & CO., occupy a room 60x30 feet, in a two story wooden building, and manufacture the Torrent Rotary Pump, on which was awarded a silver medal at the Massachusetts Charitable Association, at their tenth exhibition in September, 1865. This firm commenced business in 1866; have nine employees; make seven different sizes of pumps, varying in price from $80 to $550 each, and do business to the amount of $25,000 per annum. They have an office and salesroom at No. 49 Portland street, Boston, Mass.

CARPENTER & COOK, employ about 3,000 hands in the manufacture of straw goods, turning out about $2,000,000 of goods per annum.

O. S. POND, manufactures boxes, most of which are used by Messrs. Carpenter & Cook for packing straw goods. He employs 50 hands, and consumes about 2,000,000 feet of lumber yearly.

DANIELS BROTHERS. In the southerly part of the town is the iron foundry and machine shop of Messrs. Daniels Brothers, where they cast and finish school furniture and other light work, employing twenty-five hands.

IN the easterly part of the town is the EAGLE DYE WORKS, owned and carried on by John Dixon.

FRAMINGHAM CENTRE, 23½ miles from Boston. A station in the town of Framingham, on the Boston, Clinton and Fitchburg Railroad.

FRANKLIN, is situated 27 miles from Boston, 43 from Southbridge, 34 from Worcester, and 27 from Providence, near the Neponset river, on the Boston, Hartford and Erie Railroad.

The village is situated on a level tract of land, and contains about 2,000 inhabitants, three churches, and one academy, called the Dean Academy, a very flourishing institution. At the annual session of the Massachusetts Universalist Convention, held in Worcester, October 18th, 19th and 20th, 1864, the subject of a State Denominational School, which should be of the highest grade below that of Colleges was brought to the attention of the Council, by Rev. A. A. Miner, D. D., President of Tufts College. The Council immediately appointed a Committee, with full discretionary powers, as follows:

Rev. A. St. John Chambre, of Stoughton; Henry D. Williams, Boston; Augustus Harrington, North Becket; Rev. W. E. Gibbs, West Cambridge; Rev. E. H. Capen, Stoughton; Rev. Sumner Ellis, Boston; Hon. George Frost, Roxbury; Rev. L. M. Barrington, North Adams; John D. W. Joy, Boston; Rev. O. F. Safford, Charlestown; Newton Talbot, Boston; Rev. G. S. Weaver, Lawrence; Thomas H. Frothingham, Salem; Hon. Joseph Day, South Dedham; Avery Davis, Worcester; T. K. Taylor, M. D., Boston.

Early in the winter of 1864, this committee held a public meeting in the vestry of the School street Universalist Church, in Boston. It was well attended, and addressed in a spirited and hopeful manner by several gentlemen interested in educational matters. The attention of the denomination in the State was then called to the subject, and efforts were urged towards founding the Academy. The parish in Stoughton at once offered the sum of $25,000 and an eligible site. About the same time Oliver Dean, M. D. of Franklin, offered to deed the "Emmons estate," a tract of land of eight or nine acres, formerly the property of Nathaniel Emmons, D.D., for half a century one of New England's most celebrated orthodox divines, with $40,000 as a permanent fund, and $10,000 towards a suitable building. Although the parish in Stoughton intimated a readiness to double the sum it originally offered, it was deemed best, under all the circumstances, and with gratitude to the earnest friends in Stoughton, to accept the offers of Dr. Dean, and to call upon the denomination for the sum of $40,000, which, with the ten thousand for building purposes offered by the Doctor, would erect an edifice at the estimated cost of $50,000.

It was very soon discovered that, owing to the high prices of all building materials and of labor, such a building as was deemed essential to such an academy as was contemplated could not be erected for less than about $100,000. So full of faith were the trustees, and so nobly did Dr. Dean second their labors, and so assured were they that the future would justify their courage, that they determined, though with all possible caution, to inaugurate the work. Plans were accepted, as drawn by Mr. Thomas W. Silloway, architect, of Boston, and estimates, as nearly as could be made, were obtained. In August, 1866, the ground was broken, and the labor of laying the foundation commenced. On the 16th of May, 1867, the corner stone was laid with appropriate ceremonies. An address was delivered by Rev. A. A. Miner, D.D., the stone was laid by the President of the Trustees, and prayer was offered by Rev. John Boyden, of Woonsocket, Rhode Island. The day was very propitious, and the number of persons present were estimated at about 3,000.

As the building progressed it was discovered that the cost would exceed the estimate. Many causes combined to this end, some of which will readily be appreciated by those who have engaged in building to any considerable extent. Dr. Dean generously aided the trustees with an additional gift of $65,000, making his subscription to the building about $75,000. From other sources, also, intimations of assistance were tendered.

On Thursday, May 28, 1868, the building was dedicated to educational purposes. The day was all that could be desired. Franklin wore a joyous holiday appearance, and a vast concourse of people were assembled.

The building is 220 feet long. It consists of a central part 50 feet wide, and 60 feet deep, from front to rear. Two wings each 58 feet long and 44 feet wide, extend from this to the right and left, on a line 10 feet back from the line of central front. At the ends of the wings and crossing them

are others 27 feet wide and 52 feet long, projecting 4 feet in the front and rear.

The grade of the land is such as to give three stories at the front side and four at the rear, exclusive of the roof. The stories are respectively in height, 12 feet, 13 feet, 10½ feet, and 10½ feet and 10 feet for all rooms in the roof, with the exception of those at the end of wings, which are 13 feet.

At the base, and extending entirely around the building, is a rough, split granite underpining with a fine cut wash or bevel on the front edge, and a draft line or margin of 1¼ inches, is cut on all the arrises.

The bricks are of the best quality of common hard burnt. All cornice work and exterior finish is of pine, painted and sanded in imitation of brown sandstone.

The gutters and conductors are made of heavy copper. The roofs of the intermediate wings are covered with the material named; all the rest are slated with the best quality of Welch slates. All the Lutheran windows are coppered top and bottom. The bell deck and dome of cupola are finished in like manner.

The style of architecture is a French Lombardic, and has been executed in elaborate detail.

The windows are either circular headed or segmental; those of the roof are highly ornamented, and are a marked feature of the building.

The four elevated tower roofs, at the corners of the central part may be named as forming a fine feature of the design. The group consisting of these, and the splendid cupola at the apex of the part named, constitute an architectural assemblage of beauty and propriety, admired by all; and an effect is produced that is seldom attained in our American buildings. The cupola itself is most imposing—being elegant in its finish and proportions. It is an approach to a broken square at the base, some 25 feet in diameter, and is nearly 60 feet high, from the roof to the top of the finial.

A most pleasing success has been attained in the proportions of the entire principal facade.

After the impression of colossal grandeur, which at first view is made upon the beholder, one is inspired by the air of elegant repose, which appears as pervading the entire structure. An engraving, while it represents the building as well as anything of the kind can well do it, still fails to enkindle those æsthetic sensations, that a view of the edifice invariably produces.

It is next to impossible to give a written description in full of the plan and arrangement of the interior. Only an outline can be given.

The basement contains a fine dining-room affording accommodations for two hundred and fifty persons. There are connected with this, ante-rooms for carving, cookery, &c. The kitchen is of ample dimensions, and most thoroughly furnished with large pantries, store-rooms, refrigerators, &c. The cooking apparatus is of the most approved kind; most of the work is done by steam, and has been perfected at a cost of nearly $4,000. The laundry and ironing room is also on this floor. The former is finished with soap stone wash trays, with hot and cold water to each, and one-half of them furnished so as to constitute them boilers to boil the clothes by steam. The drying apparatus is so constructed and located, that the racks running on tracks may be drawn out into the laundry, the clothes put on, and in twelve minutes they are dried, and may be drawn on tracks directly through into the ironing room. The large coal room, sleeping rooms for domestics, &c., are also on this floor, and the large room for the steam boilers, pump, &c.

The water for use in the entire edifice is pumped by the steam pump into a large, central tank at the upper part of the building, and thence distributed into others, from which it flows to the required parts of the edifice. Ample arrangements exist on each of the dormitory floors, with the exception of the roof story, for water closets, and bathing tubs, with hot and cold water. There are also adjoining washrooms, with bowls and marble slab, and all the rooms named are finished in black walnut.

The upper room in the centre part is finished into a gymnasium 48x58 feet, and some 16 feet high. Under this room are two hospitals, one for males, and one for females, with all needed fixtures complete. There are elevators in each wing, extending through the four principal stories, for passing trunks, &c., and arrangements have been made to provide against casualties by fire, by brick walls extending from foundations to the roof, making three distinct apartments.

The principal, or entrance story, is used at the west end for a chapel, the front or central parts for parlors and reception rooms, and the rest for recitation rooms, of various sizes. The second floor contains parlors, teachers' rooms, and the remainder of the building is occupied by rooms for students, and are about ninety in number. All are finished in the most convenient manner, with closets, cases of drawers, &c., to each. All rooms are furnished with ventilating registers, and all the windows have inside blinds.

The stairs are of large capacity, and are finished with chestnut and southern pine. The corridors are all of them 10 feet in width, and extend on each floor the entire length of the building. The edifice is in every part heated by steam, and gas pipes have been put in for lighting the edifice throughout. Nothing has been omitted that would make the building one of the most thorough of its kind, and complete in its arrangements, of any ever erected.

The building is furnished with all that is necessary for the boarding accommodations of the pupils. Each sleeping room is provided with a bedstead and springs, mattrass, bolster and feather pillows, and three chairs, a table with two drawers, looking glass, marble mantle shelf, &c. Each room also contains a large wardrobe, and drawers for clothing. Every room is provided with radiators for heating purposes.

It will be proper to state here, that the denomination in the State has nobly responded to the calls made in the interest of the Academy. Many individuals have made large onations. The late Thomas A. Goddard, Esq., and Oscar F. Chase, Esq., after Dr. Dean, have been the most munificent friends the enterprise possessed.

The business in Franklin is principally in the manufacturing of straw goods, and considerable money is invested in that branch of industry, requiring the help of about 6,000 persons.

A. H. Morse, manufactures only on contracts of straw goods, in a building opposite the railroad bridge, where he commenced in 1850. The buildings are 43x30, three stories, 30x30 three stories, 22x30 two stories. He employs inside and out, about 300 hands and turns out about 2000 cases per year.

He has a tubular boiler built by Cunningham, for heating his works.

H. S. Morse commenced the straw manufacturing business in 1865, in connection with Mr. Capron, under the name of Morse & Capron, succeeding that firm in 1868.

His factory is situated on Main street, a three story building 40x50, employing 75 hands in the shop, and sending work to about 300 outside.

His annual production is about 1,500 cases. For heating the building he has a tubular boiler, made by Campbell, Whittier & C., of Boston.

H. M. Greene, commenced business in 1845, for the manufacture of straw goods in a building 20x30, 2 stories,

and employed from fifty to seventy-five hands, turning out about five hundred cases per year. His present manufactory is situated about one-eighth of a miles from the depot on Dean Avenue. The main building is 3 stories 62x60; 2d, 50x30, 2 stories; 3d, dye house 15x20, 1 story, machine shop and carpenters shop 18x22, 3 stories; in the first floor of this building he has a 5 horse engine, built by Allen & Endicott, which furnishes power only for this building, principally for repairing tools. Connecting the machine shop with the main building is a 2 story building 16x20, boiler room, with one of Allen & Endicott's tubular upright boilers. Mr. G employs in the shop about 160 hands, and gives employment to 800 persons out side. His average production is about 7,000 cases straw goods, 800 cases flock goods and 300 cases velvet goods per year.

James P. & Joseph G. Ray, occupy a mill at this place for the manufacture of shoddy. The buildings are 60x30, 3 stories and 50x40, 1 story respectively. They employ 30 persons and make 8,000 pounds of shoddy daily. The mill is situated on Mine Brook, from which the water is obtained to drive the machinery. The fall being 18 feet. They use a breast wheel 24 feet. They also have a 25 horse power engine with one boiler.

D. Thayer, Jr., manufacturer of straw, successor to D. Thayer, who established the business about 60 years ago. He occupies 2 buildings of the following dimensions, one 33 x75 feet, 3 stories high and one 20x60 feet, 2 stories high, employs 400 hands and does a business of $150,000 per annum. They use a 6 horse power engine, also a tubular boiler.

E. S. & O. F. Metcalf commenced the sash, blind, and door manufacturing business in 1865. They formerly gave all their attention to carpentering, which they commenced in 1843. They occupy buildings situated near the depot, in rear of Dean avenue, the dimensions of their buildings, which are all connected, are as follows:—30x50, 30x38, 28x45, and 30x75, all 2 stories; employ 40 hands. The machinery consists of 1 power mortising machine, 1 tenoning machine, 1 sticker, 1 splitting machine, 1 borer and grooving machine, 1 cutting-off saw, 1 jig saw, and 1 of E. B. Rich's patent saw-grinders, of St. John, N. B. The motive power is derived from a 30 horse locomotive engine, by Hoadley, of Lawrence, Mass.

Messrs. Davis & Hubbard commenced the manufacture of straw goods in 1865 in a building 50x43, 3 stories, situated near Dean avenue. They employ about 500 persons, including outside hands, and turn out about 50 cases per day during the season, using about 4,000,000 yards of straw. For heating the building and water for sizing, &c., &c., a tubular boiler is used, built by Cunningham, of Charlestown. The business was established by A. E. Daniels in 1851, one of the oldest manufacturing establishments in the State.

A. H. & M. Morse, machinists and straw machinery manufacturers, commenced business in 1866. Their manufactory is situated near the depot. They occupy 2 buildings, the first 28x48 feet, 2 stories, and the second 24x34 feet, 2 stories, with an engine house and boiler room attached, 40x 12 feet, 1 story. The engine, of 15 horse power, furnishes the motive power for their works, tubular boiler, of 25 horse power, both built by the Fuller Iron Works, of Providence. They employ 12 hands, and build about 35 machines for pressing hats per year, besides doing other job work. They yearly use about 25 tons of iron.

Fresh Pond, 5 miles from Boston and 5¼ from Waltham, on the Waltham Branch. This place is quite a summer resort for picnics and excursions from Boston.

Gardner, 15 miles from Fitchburg and 41 from Greenfield. A town on the Vermont & Massachusetts Railroad, containing three villages, West Gardner, Central Village and South Gardner, which contain together 3,000 inhabitants, 3 churches and 2 bank. Otter river rises partly in this town; on this river is some good meadow lands; the high lands are rough but good for grazing.

S. K. Pierce commenced the manufacture of cane seat chairs on Main street, South Gardner, in 1847. He now occupies a four story building 80x45 feet with a wing 40x 30 feet for his manufactory. Paint shop 60x40 feet with an ell 20x20 feet, three stories; 4 store houses 35x40 feet 2 stories each; employs 60 hands inside, and 500 females for seating chairs. The mill is filled with machinery driven by a 15 horse power portable engine, made by J. C. Hoadley of Lawrence, and a 42 horse power double turbine wheel, Leffel's pattern. Mr. P. turns out about 450 chairs per day.

Messrs. Wright & Moore commenced the manufacture of cane and wood seat chairs in 1860 in South Gardner, on Chelsea street. The business was established by Greenwood & Wright about 32 years ago. Their main building is 75x50 feet four stories, boiler house attached 28x14 one story, dry houses 22x18 feet and 14x16 feet two stories each, store houses 48x28 feet and 19x25 feet two stories each. His factory is filled with machinery run by a 12 horse power portable engine made by J. C. Hoadley of Lawrence, and a 25 horse power breast wheel 11 feet in diameter and 16 feet bucket. Employ 40 hands inside and turns out 3,100 cane and 2,800 wood chairs per month.

A. H. Brick, commenced business opposite the depot in 1850, for the dealing and finishing of chairs, occupies a building 140x35, three stories, thirty feet being two stories; employs 12 hands and finishes 2,000 chairs per month.

Eaton & Dunn. The manufacturing of chairs was commenced by Collister & Cowee in 1848, and afterwards succeeded by Eaton & Dunn. They occupy a building 125 x40, employing 70 hands, producing 120,000 chairs per annum. An engine of 60 horse power, made by the Putnam Machine Company, of Fitchburgh, Mass., furnishes the motive power for driving their machinery.

A. & H. C. Knowlton, manufacturers of cane seat chairs, occupy a factory 3 stories high and 50x100 feet. They employ 28 men in factory, about 12 men manufacturing stock in Vermont and other places. Amount of business $75,000. They use a twenty horse power water wheel.

Philander Derby, manufacturer of cane seat chairs. He occupies four buildings as follows, situated at the outlet of Crystal Lake; chair factory 137 feet long, 35 feet wide, four stories. Three store-houses 50x40 two stories; 60x14 one story, and 40x30 one story; employs 60 hands in the shop, producing 17,000 chairs annually; doing a business of $120,000. The machinery is driven by an engine of fifty horse power, made by Putnam Machine Company, of Fitchburg, Mass. The goods are sold by Philander Derby & Co., 141 North street, Boston.

Gates Crossing, 19 miles from Worcester, and 7 from Fitchburg, a flag station on the Fitchburg and Worcester Railroad.

Georgetown, 31 miles from Boston, on the Newburyport Railroad, incorporated 1838, was formerly town of Rowley. In 1867 had 2,061 inhabi-

tants, 530 voters, 10 schools, and 380 scholars. Has 2 Congregational, 1 Baptist, and 1 Catholic church. The value of real estate is $620.000, value of personal property, $260,000; tax on $100 is $1.45. The building now used by one of the Congregational churches was given to that association by Mr. George Peabody, and is the most handsome church in the county, costing $100,000. There is also a Public Library, with 3,000 volumes. The building and fixtures cost $6,000, which was given by Mr. Peabody. There is also a sum of $40,000 at interest for this town, given by Mr. John Perley, a native of the town, who died in 1868, to be expended in the building of a college to be called The Perley Free School. There is a Savings Bank, incorporated in 1869.

J. P. Coker occupies a 2 story wood building, 60x25 feet, on Main street, where he manufactures men's and boys' boots, brogans, and balmorals. Commenced businesss in 1835, employs 40 hands, turns out 300 cases brogans, 400 cases boots, 200 cases balmorals, and does business to the amount of $60,000 per annum.

Geo. H. Carelton occupies a 2 story wooden building, 36x45 feet, located on Main street, for the manufacture of boots and shoes. Commenced business in 1855, employs 10 hands, turns out 4,000 pairs boots and 3,000 pairs shoes, and does business to the amount of $12,000 per year.

J. B. Giles occupies a two story wooden building, 36x40 feet located on Elm street, where he manufactures men's, boys' and youths' brogans. Commenced business in 1864: employs 20 hands; consumes 28,000 lbs. of sole and 30,000 feet of upper leather, producing 16,000 pairs of brogans; doing a business of $18,000 per annum.

Isaac Smith occupies a wooden building, 12x12 feet, located on Main road, for the manufacture of men's slippers. Commenced business in 1848; employs 3 hands, and turns out 30 pairs of slippers per day.

George W. Chapel occupies a two story wooden building, 34x26 feet, located on Maple street, for the manufacture of boots and brogans. Commenced business in 1836; employs 11 hands; turns out 2,400 pairs of boots and 1,800 pairs brogans, and does busines to the amount of $15,000 per year.

Wm. B. Harriman occupies half of a wooden building, 40 x28 feet, located on Elm street, for the manufacture of boots. Commenced business in 1858; employs 5 hands; turns out 125 cases per year.

George J. Tenney & Son occupy a 3 story wooden building, 32x77 feet, with store house 45x18 feet, on Main street, for the manufacture of men's and boys' boots. Commenced business in 1861; employs 80 hands; do business to the amount of $150,000 per annum.

C. E. Tyler, & Co., occupy ½ of a 3 story wooden building 42x28 feet, located on Elm street, for the manufacture of boots and shoes, commenced business in 1866, employ 11 hands, turn out 3,600 pairs boots and 2,100 pairs shoes, and do a business of $9,000 per annum.

Little & Moulton, occupy a 3 story wooden building 60x40 feet with an L 50x20 feet, located on Haverhill, corner of Main street, for the manufacture of boots and shoes, commenced business in 1854, employ from 125 to 150 hands, turn out 80,000 pairs boots and brogans, and do business amounting to $100,000 per year.

J. A. Lovering & Son, occupy a 2 story wooden building 33x45 feet, and one floor of a two story wooden building 40x30 feet, located on Maple street, for the manufacture of heavy boots and shoes. The buisness was commenced in 1829, by J. A. Lovering, under present firm name in 1866, employ 30 hands. They consume 45 feet of upper and 27,000 lbs. of sole leather, producing 3,000 pairs boots and 15,000 pairs shoes, and do business amounting to $25,000 per year.

A. B. Noyes & Co., occupy a 2 story wooden building 40 x60 feet, located on Main street, where he manufactures boots and shoes, commenced business in 1866. Employ 40 hands, turn out 1,200 cases boots 500 cases shoes, and do business amounting to $75,000 per annum.

J. M. Merrill & Co. occupy a two story wooden building 20x30 feet, located on Main Road, for the manufacture of boots and shoes. Commenced business in 1868, employ 17 hands, produce 1,200 pairs per month, consume 3,000 feet of upper and 1,800 feet of sole leather, and do a business of $20,000 per year.

Alfred Hale occupies a two story wooden building 40x 30 feet, for the manufacture of boots and shoes, located on Main street. The business was commenced in 1863, employs 50 hands, turns out 240 pairs of boots and 600 pairs of shoes per month, and does business to the amount of $50,00 per annum.

Chaplin & Brewster commenced the manufacture of boots and shoes Jan. 1, 1869. They occupy one building 36x40 feet two stories, employ 50 persons, use 15 machines of different kinds, consume about $30,000 worth of stock and do a business of $50,000 yearly.

GLENDALE, 5 miles from Van Deusenville, 18 from Pittsfield and 92 from Bridgeport, a station in the town of Stockbridge, Berkshire Co., on the Housatonic river and railroad; has an estimated population of 200 persons and 1 church.

Hunter Paper Company, established business in June, 1866. They occupy a building 38x60 for the manufacture of Manilla papers, of which they produce about 468,000 lbs. Employ ten hands, and run 1 double cylinder 62 inch machine. The power to drive their machinery is derived from a water wheel under a fall of 21 feet.

GLOUCESTER, 32 miles from Boston, on the Beverly Branch of the Eastern Railroad. The territory of the original town of Gloucester occupies the whole northern promontory of Massachusetts Bay, known as Cape Ann, and is bounded on the north by Ipswich bay, on the east by the Atlantic Ocean, on the south by Massachusetts Bay, and on the west by the towns of Manchester and Essex. Its greatest width is from Two Penny Loaf, near the mouth of Chebacco river, to Eastern Point, which is about 6 miles. The narrowest part between Ipswich Bay and Massachusetts Bay, is a little less than 4 miles, and is formed by Eastern Point, a strip of unequal width, extending in a southerly direction about 3 miles, with a rock bound coast that defies the violence of the surging billows dashing almost constantly against it, and affording a safe shelter and anchorage to a large fleet. In the course of the year many hundred vessels, mostly of the fishing and coasting classes, find here a refuge from the dangerous easterly gales by which the coast is so often infested.

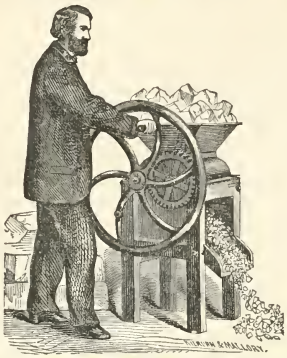
In this town, which was first settled in 1623, and incorporated in 1642, there are about 14,000 inhabitants, 3,024 of whom are voters. The number of dwelling houses is 1,772, and the number of school houses, 21—1 high and 20 mixed. The total valuation of personal estate is $3,121,791; total value of real estate, $3,585,591; and the total value of both, including highway tax, is $140,195.64. Whole number of acres of land taxed in this town, 10,611 3-16ths; number of churches, 11, viz:—1 Universalist, the first parish in the town, was established in 1642; 1 Evangelical

Richardson's Silver Medal

ICE CRUSHER,

FOR ALL WHO USE BROKEN ICE.

Improvement Patented June 3, 1868.



Patented June 20, 1862.

Are used by Hotels, Ice Cream Saloons, and Fresh Fish Dealers.

PRICES OF MILLS DELIVERED IN GLOUCESTER:

Largest size, for steam power	$150 00
Common size with two wheels, } in general use	72 50
Common size with one wheel, } see above cut	60 00
Medium, a new size for medium business	35 00
Smallest size, for bars, soda fountains and family use,	12 50

Manufactured by Nathan Richardson, for Richardson Mill Co.

D. W. LOW, Agent, Gloucester, Mass.

RICHARDSON'S IMPROVED PATENT STEERING APPARATUS.

The attention of the public is called to the above improvement upon the ordinary steering apparatus in common use, as possessing the following advantages, the importance of which will be at once recognized by nautical men:

1. The action of the sea upon the rudder has no effect upon the wheel, consequently it is not necessary to hold it in position; but it will remain as placed by the helmsman under all circumstances.
2. It is very quick in its effect upon the rudder, and perfectly easy of motion at all times.
3. There is no fore and aft, or athwart ship vibrations.
4. It will permit upward motion without derangement.
5. There is no noise or jar in its operations at any time, and being perfectly steady and unaffected by the sea, it is a safe support to the helmsman.

E. F. STACY, AGENT,

Gloucester, Mass.

Congregational, organized November 17, 1829; 1 Independent Christian (Universalist) church, 2 Baptist, 2 Methodist Episcopal, 1 Mariners' Bethel, 1 Roman Catholic, 1 Universalist, at Annisquam, and 1 Orthodox Congregational, at Lanesville. Number of children attending school between the ages of 5 and 15, 2,851.

Societies. Gloucester Library Association—This association has rooms at No. 113 Front street, open daily, Sundays excepted, from 3 to 5 and 7 to 9 P. M. The Lyceum was organized February 20, 1830, and added the library, which contains about 3,500 volumes. March 18, 1854, Gloucester Fisherman and Seaman's Widows and Orphan's Aid Society, organized March, 1862. Ladies' Charitable Society—Annual meeting, first Wednesday in January. Seaside Band of Hope, organized November 8, 1866, numbers about 425; meetings held each month in the vestries of different churches in the town.

Banks. Gloucester National Bank, established 1796, capital, $300,000; Cape Ann National Bank, capital, $150,000; First National Bank of Gloucester, capital $120,000. Savings Banks—Cape Ann Savings Bank, incorporated 1846, amount of deposits, $70,000.

Cape Ann Mutual Marine Insurance Company, capital, $50,000; Gloucester Mutual Fishing Insurance Company.

Nathan Richardson occupies a two story wooden building 40x20 feet with a blacksmiths' shop attached 20x30 feet, and an ell 16x17 feet, situated at No. 61 Spring street, commenced business in 1860, employing 6 hands, manufacturing N. Richardson's patent ice crushers, steering machines, bait mills, hoisting and boring machines and general machinery, turning out 100 steering machines and about 60 ice crushers per annum. The motive power is furnished from a 5 horse power engine built by Allen & Endicott of Cambridgeport, who also built the upright tubular boiler of 10 horse power which furnishes steam for the engine.

Merchant & Shepherd, manufacturers of hard and soft soap, commenced business in 1843. They occupy a 1½ story wooden building, located at Duncan's Point, have three employees, turn out about 9,000 pounds of hard and 8 barrels of soft soap per month, consuming about $4,000 worth of rough tallow per year.

Cape Ann Anchor Works, capital $25,000, incorporated 1867. This company's works are situated on Vincent's Point near Spring street, occupying a 1½ story wooden building 80x50 feet, employ 14 hands, manufacturing anchors and vessel works. The motive power is furnished from 2 engines, steam furnished from a 60 horse power cylinder boiler, also have a steam hammer of 48 horse power, built by Lyman Kinsley & Co., of Cambridgeport.

Tarr & Wonson, manufacturers of copper paints for the preservation of vessel's bottoms, occupy a mill house 1½ stories 40x30 feet wood, packing house 2½ stories 50x40 feet, wood, paint shop 28x40 feet 2½ stories wood, and burning house 20x30 feet 1½ stories, located on Rocky Neck, East Gloucester. They commenced business in 1860, have 20 employees, turning out 12,000 gallons per annum, doing a business of $50,000. This firm also run a large French Burrstone mill and one bolting machine, which are driven

by an engine of 16 horse power. Office 131 Commercial street, Boston.

GLOUCESTER AND BOSTON SALT FISH CO., occupy a three story wooden building 70x30 feet, store-house attached 70x18 feet, located at Rocky Neck, East Gloucester, for the manufacture of desiccated fish; employing when in full operation about 125 hands. Have a capacity for turning out 500 cases 24 lbs. to a case per day. Their machinery is driven by a ten horse power engine, built by Allen & Endicott, furnished with steam from a fifty horse power tubular boiler, built by Allen & Endicott. The business was commenced in 1869. Office in Boston, No. 5 Commerce street.

ODESSA SKIRT COMPANY, commenced business in 1865. This company occupy a building 40x60 feet, four stories high, for the manufacture of the Odessa Patent Collapsing, and the Parisian Adjustable Panier Skirt, employing about 100 girls.

They have just commenced to manufacture ladies and childrens undergarments, and are going to run fifty sewing machines, and will employ as many girls.

The office of this company is at Boston, No. 58 Summer street.

THE manufacturing of mouldings, gutters, &c., is carried on by J. B. BURNHAM, occupying a two story building 100x 24 feet. His machinery is driven by an engine of twenty horse power.

GRAFTON, 38 miles from Boston, and 6 from Worcester, a village and town on the Boston & Albany Railroad and Providence & Worcester Railroad, 34½ miles from Providence, and 9 from Worcester. The Post Office at the station on the Providence & Worcester Railroad is called Saundersville. Population 500; two public schools and one church. The Blackstone river runs through the place.

THE SAUNDERS COTTON MILL, located here, was incorporated 1850. Capital, $175,000. E. Saunders, of Saundersville, President; James Read, of Boston, Treasurer. The new mill is 170x50 feet, 3 stories and attic, with L 75x36, 3 stories and attic; picker house, 38x36, 2 stories. The mill contains 10,000 spindles, 210 looms, manufacturing print cloths and sheetings, producing 45,000 yards per week, consuming 7,000 pounds of cotton; employ 150 persons. The mill is heated by steam; the water power here is not all improved.

This town was incorporated 1735. The Indian name was Hassanamisco. Blackstone river and several large ponds give this town a constant water power. Grafton has a fine soil, is beautifully located and flourishing. The Quinsigamond, the outlet of a pond of that name in Shrewsbury, passes from North to South through the town, with a descent of between 50 and 60 feet on this stream, in the Northeastern part of the town is New England Village, and at its junction with the Blackstone, at the Southern part of the town, is the village of Farnumsville. These villages are distant from each other about 4 miles. They possess an abundance of water power and are very neat and flourishing manufacturing villages. The central village, called Grafton Centre, is on elevated ground and very pleasant. It lies 3 miles Southeasterly from New England Village, about 1 mile from Grafton depot, on the Boston & Albany Railroad. The Providence & Worcester Railroad passes through the westerly part of the town, 2½ miles from the centre. In 1865, the population was 4,962; has 8 churches: 2 Congregational, 1 Free Will Baptist, 1 Methodist, 1 Unitarian, 2 Baptist, and 1 Roman Catholic. Dwelling houses, 632; acres of land taxed, 13,677; No. of polls, 1,035; Real estate, $1,109,692, personal property, $600,534; Rate per cent. $12.72 per $1,000.

The manufacturers at or near the station, on the Boston and Albany Railroad, are as follows:

J. H. ALLEN occupies a one story wooden building, 18x30 feet, for the manufacture of ladies' and misses' shoes. Employs 8 hands and turns out 4 cases per week.

J. S. NELSON & Co. occupy a two story wooden building, 30x50 feet, in the manufacture of women's, misses' and children's shoes. Commenced business in 1856. Has 25 employees, and turn out 500 cases per annum.

The manufacturers at Grafton Centre are as follows:

C. C. WOOD occupies two floors, 15x50 feet each, in two story wooden building, located on North st., in the manufacture of boots and shoes. Business was first established by Liberty Wood, some years ago, and his successor, C. C. Wood, taking possession August, 1868. Employs 25 hands, and turns out 1,000 cases of goods per annum.

B. K. MOULTON occupies a two story wooden building, 40 x43 feet, and basement, located on North street, for the currying of leather for boots and shoes. Commenced business in 1850, and has five employees.

H. C. GREENWOOD occupies a two story wooden building, 30x50 feet, and part of two floors 15x50 each, in another 2 story wooden building, for the manufacture of hand made boots and shoes for the retail trade. Commenced business in 1855. Has 125 employees, and turns out 2,500 cases annually.

J. W. MCKENZIE, occupies a 2 story wooden building 30 x54 feet, for the currying of leather for boots and shoes, also dealer in leather generally, commenced business in 1862, has 5 employees and turns out 5000 sides per annum, machinery consists of Stuffings & Glassing machines power, furnished from adjacent building.

ALLEN & FLAGG, occupy a story wooden building 25x35 feet with L attached 22x30 feet, for the manufacture of hand made boots and shoes, commenced business March, 1846, work let out to different parties and turn out 1,200 cases per annum on an average.

J. W. SLOCOMB & SON, occupy a 3 story wooden building 35x45 feet, with basement, for the manufacture of hand made boots. Business established in Northbridge, in 1813, moved to Grafton Centre in 1836. Work let out to different parties, turn out 2,500 cases per annum on an average.

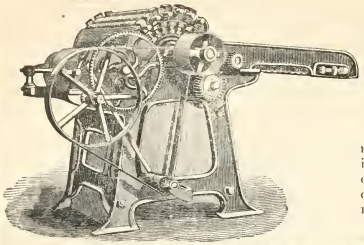
E. B. BIGELOW, occupies a 2 story wooden building 30x 66 feet, for the currying of leather for boots and shoes, commenced business in 1864, has 10 employees and turns out 13,000 sides per annum.

L. W. DODGE & SON, occupies a 3 story wooden building 44x45 feet with basement, for the currying of leather for boots and shoes. Business was first established by Mr. Dodge in 1837, the firm has now 8 employees and turn out 12,000 sides per annum.

GEO. W. ESTERBROOK, occupies a story wooden building 40x60 feet, for the currying of leather for boots and shoes, also dealer, commenced business in 1855, has 14 employees.

H. S. WARREN occupies two floors, 40x60 feet, in a three story brick building, for the manufacture of hand made boots and shoes, and currying of leather; work let to different parties. Commenced business in 1851, and turns out 1,000 cases boots and shoes per annum on an average.

A. J. HALL occupies a two story wooden building, 20x40 feet, for the manufacture of inner sole stiffening and heeling. Commenced business in 1867; employs 6 hands. Machinery consists of one rolling machine. Power furnished from adjacent building.

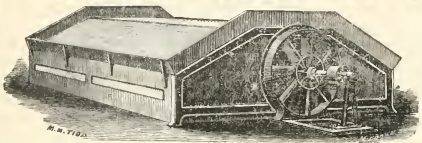


METALLIC WASTE CARDS.

For Yarn and Thread Waste; Also, Soft Flannels.

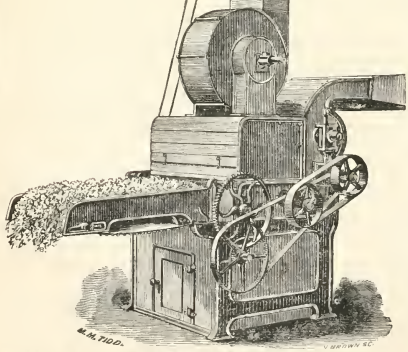
These machines are in principal a Carding Machine, but made with strong, sharp steel teeth. The main cylinder is 14 inches in diameter; workers and doffer same as an ordinary card. The stock is doffed from the doffer in a sheet same as an ordinary card machine. This machine preserves the staple, making it nearly as good as the original wool.

COLD-AIR WOOL DRYER.



The machine occupies 9x15 feet, on the floor. Will dry from 2,000 to 3,000 lbs. of wool per day. No steam or other hot pipes connected with it. This machine is endorsed by all the insurance companies, as being perfectly safe as to fires. Manufacturers having them in use, say their wool works better, and their goods have a softer feeling, and a better finish can be put upon them than when the wool is dried by a powerful heat. These machines have a new patent fan, which runs with but little power, a 2½ inch belt will drive them with ease. The machine is placed upon the floor, and leveled up, and made air tight all around the bottom. The fan is then placed up to the end of the machine, and firmly fastened to the floor. The connection between the fan and dryer is then made air tight by connecting the joint. The pulleys on the fan are 8 inches in diameter, 2½ inches face, and require a speed of 700 turns per minute. The operation of the machine is as follows: The wool or other material to be dried is placed on the wire netting, all of the surface completely covered, (say 300 lbs. of wool.) The fan being an exhaust fan, forms a vacuum in the body and frame of the machine, under the wool and wire screen. The air surrounding the machine in the room rushes down through the wool to fill the vacuum formed by the fan, and in its passage absorbs the moisture from the wool. The room in which the dryer is located must be arranged with some means for heating by steam pipes, around the walls or otherwise. In wet weather, artificial means must be employed to furnish dry air for the machine.

PATENT BURRING MACHINE.



For Mustize or other Burry Wools, and is equally valuable for domestic wools. Where desired, a lap cylinder is attached, which delivers the wool in an even web or sheet, instead of flowing into a gauze room. Some 250 of these machines are in use in our manufactories, all of which are giving entire satisfaction. This machine is made only on orders.

Burr Machines, for wool card machines, equal to any in use; by many, called much superior.

Metallic Feed Rollers and Lickerins, for wool cards. A superior article for 2d breaker and finisher cards.

Patent Cotton Cleaning Machines. The only simple constructed machine, which will entirely extract dust from cotton, and at the same time open and clean out all foreign matter, without loss of staple.

New England Combing Machine.

Wool Washing Machines, on an improved plan. The wool being fed upon an apron, and passing through the washing process and pressed nearly dry. The labor required being simply the feeding the wool on the apron; all other manipulations being performed by machinery, and is worthy the attention of all woolen manufacturers.

All kinds of *Worsted Machinery, Belt and Ring Combing Machines*, for coarse and fine work.

C. G. Sargent's Patent Cotton Cleaning Machine, Flax and Hemp Machinery.

CHAS. G. SARGENT, Proprietor, Graniteville, Mass. { Near Lowell, on Stony Brook Railroad.

E. C. Cottle occupies a two story wooden building, 28x50 feet, for the currying of leather for boots and shoes. Commenced business in 1864. Has five employees, and turns out 8,000 sides per annum. Machinery consists of stuffing and glassing machine and grinding machine. Power furnished by a 10 horse power steam engine, built by Swamscot Machine Co., So. New Market, N. H.

Forbush & Brown occupy a three story brick building 40 x50 feet, for the manufacture of hand made boots and shoes. Commenced business in 1866; has 100 employees.

S. J. Axtell & Co. occupy a two story wooden building, 35x80 feet, for the manufacture of hand made kip boots and shoes. Commenced business in 1850. Have 30 employees, and turn out 2,000 cases per annum.

Oscar Stratton occupies a two story wooden building, 30x60 feet, with basement, for the currying of leather for boots and shoes. Commenced business in 1859, and has six employees.

C. L. Pratt & Co. occupy a four story brick building, 44 x75 feet, with an ell attached, 30x33 feet, located at Centreville town, in the manufacture of brown sheetings. This firm was established about 25 years ago; employ 40 hands. Machinery consists of 1,600 spindles and 60 looms; turn out 15,000 yards per week. Power furnished by a 45 horse power iron water wheel Warren's patent.

H. C. Greenwood commenced the manufacture of men's, boys' and youths' boots and shoes, in the year 1856. The factory is 60x30 feet, two stories and basement. He employs 100 men and 20 women, and turns out 75,000 pairs of the above yearly. Amount of business yearly, $175,000. The salesroom is at Dayton, Ohio, and is 90x25 feet, four stories with basement.

The manufacturers at New England Village, are the

Grafton Mills, established January, 1862, for the manufacture of light sheetings and printing cloths, keep three mills in operation of the following dimensions respectively. One known as the Upper Mill is a four story wooden building 60x100 feet, the Middle Mill is a 3 story wooden building 40x55 feet, one as the Lower Mill, a four story stone building 50x100 feet. Employ 250 persons, and run 12,400 spindles, 287 looms. Power furnished by three iron water wheels, horse power of each, as follows: one, 143 horse power, built by Stout, Mills & Temple; one, 119 horse power, built by Warren, and one 20 horse power, United States wheel.

GRAND JUNCTION, 42¼ miles from Providence, and 1 mile from Worcester. Providence and Worcester, Boston and Worcester, Worcester and Fitchburg, Norwich and Worcester Railroads centre here.

GRANITE BRIDGE, a small station on the Dorchester and Milton Branch Railroad.

GRANITEVILLE, 8 miles from Groton Junction, and 37 from Boston, a village on the Stoney Brook Railroad, containing 250 inhabitants, and on Stoney Brook. This is one of the many of those little villages that one finds in New England, enterprising, thrifty, and independent.

C. G. Sargent commenced business in 1850 for the manufacture of woolen and worsted machinery. At that time his works were in Lowell, and in 1855 he removed here. The shop into which he moved burned down in 1856, and in 1857, within four months from the fire, he had erected 4 buildings just below where the old shop stood, and within a quarter of a mile of the depot. The names of the buildings and dimensions are as follows:—No. 1 mill, 185x52, L 40x 32 feet, 2 stories; No. 2, 100x52 feet, 2 stories, used by the Worsted Company, the remainder, including the L, is used by Mr. Sargent for a machine shop; No. 3 mill, see Abbot Worsted Company; No. 4, used jointly with his son, Mr. Sargent using his part for getting up machinery and finishing. The office building, 40x20 feet, 2 stories. Mr. Sargent intends this spring to enlarge his works, so as to meet the increased demand for machinery. He built, in 1867, a dam, out of split stone, 7 feet at the bottom, 3 feet at the top. The stones are laid in cement, making the dam perfectly water tight. Afterwards he had heavy gravel put on the side so as to make a drive way 20 feet wide, thus making the dam doubly secure.

At present he employs 50 hands, turning out wool, washing, drying, burring, and combing machinery, the last for worsted goods.

Since 1863 he has completed and shipped 117 burr pickers, and since 1866, 230 wool dryers and wool cards.

Abbot Worsted Co., J. W. Abbot and A. Cameron proprietors. This firm commenced business in 1857 for the manufacture of worsted yarns, also jack yarns. They occupy a part of the building owned and used by C. G. Sargent. Their part being 100x52 feet 2 stories in the main building. This is where they make their worsted yarns. The jack yarn is made in the mill below, 60x35 feet 3 stories. They have 2 storehouses 60x40 feet 2 stories, and 40x30 feet 1 story; capacity for storing 1,000 sacks of wool. Employ 65 hands, running 2 sets of worsted machinery, using 2,000 pounds of wool in grease per day, turning out 555 pounds worsted and 555 pounds of jack yarn daily. The motive power in the main building or worsted mill is furnished from a 42 inch turbine wheel 21 feet fall of 100 horse power capacity, and in the jack yarn mill from a 36 inch wheel 21 feet fall of 52 horse power.

Star Label Co., F. G. Sargent proprietor, commenced business in 1867 for the manufacture of all kinds of tags for shipping purposes, &c. He occupies what is called No. 3 mill, owned by his father, C. G. Sargent, situated in the rear of main building across the brook. The building is 35 x96 feet 2 stories; employs 20 hands, running 1 machine of his own invention, with a capacity of turning out 2,000 tags per hour. In connection he has 4 cards for picking up woolen stock, making card waste, &c. The motive power is furnished from a Swaine turbine wheel, 30 inches, 21 feet head of 35 horse power.

GRANTVILLE, 13 miles from Boston and 31 from Worcester, a station on the Boston and Albany Railroad, in the town of Needham.

GREENFIELD, 36 miles north of Springfield, and 106 west of Boston, on the Conn. river and Massachusetts and Fitchburg Railroads. The village is situated about 1½ miles from Connecticut river, and is very beautiful and flourishing, commanding a fine view of the surrounding country. This village is the shire town of Franklin county, and the centre of a large agricultural community, and contains about 4,500 inhabitants, 6 churches, 2 national, and 1 savings bank.

About one half mile or more southeast of the village the Vermont and Massachusetts Railroad crosses the Connecticut River Railroad, but by agreement they run to the

depot on the latter road to leave passengers, and take those who wish to go to Shelburne Falls and Hoosac Tunnel. This branch was opened, and trains commenced running in August, 1868, and when the tunnel is completed, will be the most direct route from Boston to the West.

Felt & Co, founders, machinists, and machinery manufacturers, commenced business in 1866, on the right bank of the Green river, about a quarter of a mile below the Cutlery Works. The business was established in 1829 by Wilson & Pearce.

Messrs. Felt & Co. occupy 3 buildings. Their machine shop, 25x60 feet, 2 stories, is filled with lathes, drilling machines, and such other machinery as are found in machine shops. The foundry building, 120x30 feet, 1 story, is divided off 30 feet for a blacksmith's shop. Their store house is 50x30 feet, 2 stories. They employ 16 hands, and use about 15 tons iron per month. Motive power is furnished from a 3 feet turbine wheel, with 10 feet fall, of 22 horse power.

Among the manufacturing companies which have made this town known to the civilized world at large, is the establishment of the John Russell Manufacturing Co. This company was incorporated in 1868, with a capital of $525,000. John Russell, President; Charles W. Russell, Treasurer; Frederick Clapp, Secretary; and Matthew Chapman, Agent;—for the manufacture of all kinds of table and pocket cutlery. Mr. John Russell, the president, a man 72 years of age, who was born in 1797, commenced the manufacture of edged tools in Greenfield, in 1834, giving employment to about 70 men. His factory was located near where the depot now stands; in 1836 it was destroyed by fire and rebuilt upon its present site, about ¼ of a mile below the depot, in a valley. At this time, the business was carried on under a copartnership, but in 1855 was formed a joint stock company, under the style of J. Russell Mfg. Co., with a capital of $175,000, and continued until June 18th, 1868, when they took out a new charter, under the name of John Russell Mfg. Co., with privilege of removing their works to Turner's Falls, 3 miles distance, on the Connecticut river, where they are erecting buildings, which will be filled with the latest and most improved machinery, and having one of the best water privileges in the country.

Their buildings in Greenfield are built of stone, brick, and wood, and form two clusters, the Green river running between, which a mile below flows into the Deerfield, thence into the Connecticut.

Of the buildings on the right bank of the river, commencing with the largest, is their grinding and finishing shop, 330x32 feet, 2 stories high, where may be seen in long rows no less than 70 immense grindstones, with 140 grinders, one of these stones only lasting from five to six weeks. In the polishing room no less than 1,075 emery wheels are used each day, and 2 men are employed in preparing new wheels, using 18 sides sole per month. 102 men are employed at the emery wheels, and when polishing ivory or bone, clouds of dust would arise, if provision had not been made to pass it off through the roof. This is done by powerful steam fans with suction-pipes, one of which is placed over the tops of each wheel. The office, packing and store rooms occupy a 3 story building, and employ from 6 to 10 men.

Crossing the river, we find a village of shops built on three sides of a square composed of fifteen or twenty different houses. There are 2 forging shops, a house for stowing steel, a blacksmiths' shop, a machine shop, a hammering shop, a hardening shop, a tempering shop, a hatting, sawing, cutting, press room, &c., besides several other buildings. In the forging shop there are 12 steel trip-hammers, and 8 drops for making the "bolsters of the knives and forks. In the hardening shop, 6 men are employed heating the blades of the knives to a red heat, and dipping them in cold oil, for the purpose of hardening the steel. With the exception of butchers' knives, everything in the manufacture of cutlery is done by machinery. These require a little extra hammering, which is done by hand in a separate building. Here from 25 to 30 anvils are constantly ringing, while a row of forges glow in the centre of the room.

The machine shop contains large lathes and other instruments for the manufacture of machines. A building is devoted to tempering of blades of knives, and men can be seen standing before hot beds of sand on which the knives are laid, watching the changing tints of steel by which is determined the proper temper of the blade. In the room where the handles of knives are sawed there are employed 16 men standing before as many rapidly revolving circular saws. The various woods to supply these saws are placed close at hand, and as fast as sawed are removed to the dry rooms and store houses.

In another part of the concern a press can be seen in constant operation, which prints on the blade the trade mark of the firm, or the name of some customer, many parties having their own stamp used on their goods. In the press room, where the handles are shaped, there are 36 presses, run by 6 men, each man running 6 presses, turning out 50 dozen knife and fork handles per day.

This company employ 500 hands, turning out 80 gross of table cutlery, 130 dozen of ivory table cutlery, and 250 dozen miscellaneous goods daily, using 2 tons of steel per day, and of raw material consumed per year—of cocoa or grandilla wood, 304,487 lbs.; rosewood, 56,792 lbs.; ebony, 112,000 lbs.; and of ivory 36,000 lbs., besides there is annually consumed about 3,000 lbs. of beeswax, 44,000 lbs. emery, 400,000 lbs. of grindstones, 2,500 gallons of oil, 25,000 bushels of charcoal, and 2,000 tons hard coal. Truly may it be said to be the largest cutlery establishment in the world.

This establishment derives its motive power from 2 steam engines of 350 horse power combined, furnished with steam from 8 flue boilers, made by Messrs. Woodruff & Beach, of Hartford, Conn. Also 3 turbine water wheels of 125 horse power.

Thompson Manufacturing Co. commenced business in the summer of 1868, for the manufacture of chisels, gouges, screw-drivers, &c.; Thompson's hollow bit stock, Thompson's patent hollow iron gates, &c. Motive power, water; 32 feet fall. They use a 45 horse power Bodine's Jonval turbine wheel. The factory is located on Mill Brook stream.

Greenfield Tool Co. This company was incorporated in 1851, for the manufacture of joiner's bench plains, moulding tools, &c. Capital, $72,600. George W. Potter, President; A. Parker, Treasurer; B. S. Parker, Secretary.

The business was established in 1847 by A. Parker, at Conway, Mass. His works were burned down in 1850, when he removed to, and formed the incorporated company, in Greenfield.

Their main work shop is 200 feet long by 36 feet wide, 2 stories; engine house, 1 story, with boiler room attached, is 30x75 feet, 2 stories; blacksmith's forge and machine shop, 1 story, 30x60 feet; packing and store house 30x75, 1 story, with counting room attached, 30x40, 2 stories; timber building, 40x200 feet, 2 stories,—this building is used for storing seasoned lumber. Their works are situated about half a mile above the depot, on the left side of the Connecticut River Railroad. They employ from 50 to 75 hands.

The motive power is furnished from a 125 horse power engine, made by Putnam Machine Co., Fitchburg; steam from 2 tubular boilers, made by Kendall & Roberts, of Cambridgeport. This company consume from 300,000 to

STAR LABEL COMPANY,

MANUFACTURERS OF THE

PATENT READY-STRUNG & MERCHANDISE

TAGS,

AND ALSO OF THE

Pocket Tag or Label,

—AND—

IMPROVED SHIPPING CARDS.

F. G. SARGENT,

PROPRIETOR,

Graniteville, Mass.

500,000 feet of lumber annually. Produce 4,000 planes, with a capacity of 10,000 per month.

Warehouses: 134 Congress street, Boston; 77 John st., New York; 415 Commerce street, Philadelphia. Supplying the Californian, South American and Australian trade almost entirely.

GREEN LODGE, 10¼ miles from Boston on the Stoughton Branch Railroad. A country station.

GREENWOOD, 9 miles from Boston, and 18 from Lawrence, a flag station on the Boston and Maine railroad, between Wakefield Junction and Stoneham.

GROTON CENTRE, 31 miles from Worcester, and 15 from Nashua, on the Worcester & Nashua Railroad. A quiet country village containing two churches. The inhabitants are mostly engaged in agricultural pursuits. The town of Groton is finely watered by the Nashua and Squanecook rivers and a number of beautiful ponds.

GROTON JUNCTION, 35 miles from Boston, and 15 from Fitchburg. Population 800. Three churches.

Wood, Prescott & Co. commenced business in 1867, for the manufacture of all kinds of work for machinery, &c., &c. The business was established in 1860, by H. P. Ross. Main building 114x40 feet, one story, foundry; 36x18 feet, 2 story, casting, cleaning shop, &c. Employ 25 hands. This firm use on an average, about 3½ tons iron per day. Derive their motive power from a seven horse power portable engine made by Bird & Co., of East Boston.

GROUT'S CORNER, (now Miller's Falls,) 100 miles from New London, 98 from Boston, and 180 from New York. A station on the Vermont and Massachusetts Railroad, and at the terminus of the New London and Northern Railroad.

GROVELAND, incorporated in 1850, has 1,693 inhabitants, located ½ mile from Groveland Station on the Newburyport Railroad, it is 30 miles from Boston, 83 miles from Portland, on the right bank of the Merrimac river. Has 4 churches, 6 schools and 300 scholars. Value of real and personal property, $700,000. Number of voters 400.

P. Page, occupies a 2 story wooden building 20x25 feet, located on Main street, where he manufactures boots and shoes. The business was commenced in 1833. Employ 2 hands.

R. H. Page, occupies a 2½ story wooden building 40x60 feet, another building 2 stories 30x36 feet, for the manufacture of ladies', misses' and children's boots, located on Main street, commenced business in 1845, employs 40 hands, consumes 400 lbs. of sole and 700 to 800 lbs. of upper leather, producing 360 pairs of boots per day, does a business of $175,000 per annum.

Charles Stickney & Co., occupy a 3 story wooden building with basement 80x25 feet, with store house 22x40 feet, located on Main street, for the manufacture of ladies', and misses' pegged shoes. The business was commenced 1858, employ 70 hands. Their machinery is driven by a steam engine 10 horse power, built by John Day of Boxford, Mass., with 1 flue boiler 18 horse power, they turn out 1,500 pairs per week, consuming 1,800 lbs. of sole and $3,000 worth of upper leather per month, and do business to the amount of $100,000 per annum.

Andrew J. Huntress, Agent, occupies a two story wooden building 22x30 feet, located on Main street, for the manufacture of womens', misses, and childrens' boots and shoes. Commenced business in 1856; employs 40 hands; turns out 20 cases per week; does business to the amount of $40,000 per annum.

N. E. Ladd, manufacturer of ladies' and misses boots and shoes, occupies a two story wooden building 25x35 feet, located on Common street, where he employs ten hands. Commenced business in 1865; does business to the amount of $15,000 per year.

Williams & Curtis, occupy a three story wooden building 22x34 feet, located on Main street, for the manufacture of women's and misses pegged boots. Commenced business in 1868; employ 11 hands; turn out 710 pairs per week; consume 320 pounds of split, 200 calf skins, 300 feet of buff, and 900 pounds of sole leather, and do a business amounting to $50,000 per year.

N. T. Stickney, occupies a 2 story wooden building 30x36 feet located on Main street, for the manufacture of ladies' machine sewed shoes; turn out 62 pairs per day. Commenced business in 1864; employs 20 hands; consumes 72 lbs. of sole and 150 feet of upper leather per day, and does a business of $35,000 per annum.

GROVE STREET, six miles from Boston and 4½ from Waltham. A station on the Watertown Branch.

HAGGETT'S POND, 9 miles from Lowell and 4 from North Lawrence, is beautifully situated on the Lowell Railroad. A small village of some 30 houses. Large ice houses are located here, which stores the ice that furnishes Boston, Lowell, Lawrence, and adjacent places.

HALIFAX, 28¼ miles from Boston, and 12 west from Plymouth, on the Plymouth Branch of the Old Colony and Newport Railroad. The surface of the town is generally level, with considerable good soil. The Indian name of this place was Monponset, which is the name of a large pond of water here. Population, 1837, 781; in 1867, 766.

HANOVER, 25¾ miles from Boston. A small village at the terminus of the Hanover Branch of the Old Colony & Newport Railroad, running from N. Abington. Opened in 1868. Population of the town, 1,600.

HANSON, 24¾ miles south-south-east from Boston, 13 north-north-west from Plymouth, situated in a town by the same name, on the Plymouth Branch of the Old Colony and Newport Railroad.

HARVEY & LOVEJOY,

MANUFACTURERS OF

Men's, Ladies', Misses' & Children's

FASHIONABLE

Glove Calf, French Kid, Pebble Calf, Oil Goat, Brush Goat and City

WALKING BOOTS

Near the Boston and Maine Railroad Station,

HAVERHILL, MASS.

The town is watered by a branch of North river and several ponds. It was taken from Pembroke in 1820, and lies in the vicinity of large beds of iron ore.

HARRISON SQUARE, 3¾ miles from Boston, on the Old Colony and Newport Railroad. (For manufacturers see Dorchester and Boston.)

HARVARD, 21 miles from Nashua and 25 from Worcester, a village and town on the Worcester and Nashua Railroad. This town was taken from Stow, Groton and Lancaster, in 1732. Two large ponds with fine fish are found in this town, also quarries of slate used for monuments. Population of the village 2,500.

HARWICH, a town of about 2000 inhabitants, situated about three-quarters of a mile from the depot, on the coast. The business here is principally in the fisheries. Harwich, is situated 88 miles from Boston, and five from Orleans, on the Cape Cod Central Railroad and contains one church.

HATFIELD, 21 miles from Springfield, a village and town on the Connecticut River Railway. The manufacture of brooms is carried on here quite extensively.

HAVERHILL, 29 miles from Boston, 22 from Salem, 14 from Newburyport, 18 from Lowell, 9 from Lawrence and 30 from Portsmouth. This city is situated on the Merrimac river, the 4th river in size in New England, and about 18 miles from its mouth. First settled in 1640. The city charter of Haverhill was accepted May 15th, 1869, by vote of 671 to 141. Election of officers first Monday in December, 1869. City Government to be assumed first Monday in January, 1870.

In the year 1792, Samuel Tenney, Uriah Gage and Timothy Phillips were manufacturing sale shoes in Bradford. They found a market for their goods in Boston, Salem and Newburyport. This trade was soon carried by the commerce of these towns to the West Indies and Southern States. In the year 1795–6, Allen Dodge of Newburyport, and Samuel Tenney of Bradford, started on a trading expedition to the District of Columbia, they established a general commission business in Georgetown, from which Mr. Tenney soon withdrew and went to Charleston, S. C. The shoe manufactories of Bradford, continued for many years to consign goods to Mr. Dodge and his brother Frank who was his successor. Mr. Allen Dodge was the father of Hon. A. W. Dodge, Treasurer of Essex County and grandfather of "Perley," the distinguished correspondent of the Boston *Journal*.

At the beginning of the present century, Moses Atwood of Haverhill, a storekeeper and the father of the celebrated female missionary, Harriet Newell, commenced getting out sale shoes. He was the first shoe manufacturer in this city. The war of 1812, stimulated the production of shoes still more, and there was quite an increase in the number of manufacturers in Bradford and Haverhill, during the next 5 years. Daniel Howe, Jr., the leading merchant of Haver-

hill, and several others did an extensive and successful business.

In the year 1838 the manufacturers of Bradford removed their business to Haverhill, across the river, where they have remained ever since, leaving the former place to become a quiet and beautiful residence for many of the business men of Boston and Haverhill. Located upon the border of a large agricultural district, which embraces the whole of Eastern New Hamshire, where the principal employment of the people is shoe making, they have facilities for producing every variety of women's, men's and children's pegged, sewed boots and balmorals, with men's and women's slippers. Should the business continue to increase for the next 20 years, the beautiful hills by which the town is surrounded will be covered with the residences of her citizens, and many of their present places of abode will be given up to the demands of her merchants and manufacturers.

As a producer of boots and shoes in Massachusetts, Haverhill rank second to Lynn only. She gives employment in this business to more than six thousand men, women and children. Boot and shoe manufacture is, of course, her principal industrial interest, but other branches of manufacture, textile fabrics, hats, nails, tacks, &c., are extensively and successfully prosecuted.

MANUFACTURERS.

Harvey & Lovejoy, shoe manufacturers. Messrs. J. A. Harvey & D. Lovejoy, J. A. Harvey, senior partner, commenced business in a small way in 1862; in 1867 connected with him D. Lovejoy, under the style of Harvey & Lovejoy, doing business in their 3 story building, 100x80 feet, situated by the Boston and Maine Railroad station. They manufacture men's, ladies', misses', and children's boots, shoes, and slippers. They make a speciality of ladies' work, of calf, glove calf, goat, kid, and English serge city walking boots. The style of their boots exhibited was rather remarkable, being of peculiar patterns, and that of the latest style, and the work in every way creditable. We notice in the stitching of their goods an extra row of stitching more than usually seen. This being quite an essential point, as there are many complaints about the ripping of seams by use of poor and scanty threads. They have connected with their factory one of the largest retail stores in New England, retailing 40,000 pairs per annum, nearly all of their own manufacture, thus enabling them to get very near to the idea to the wants of the people in boots and shoes. Their goods are particularly adapted to the New England trade.

Mitchell, Butters & Rust, occupy a three story and basement brick building, 42x120 feet, located in the rear of the Town Hall, for the manufacture of wool hats. They commenced business in 1868; employ 100 hands, and turn out from 75 to 100 dozen hats per day, and do business of from $200,000 to $300,000 per year. They require about 40 horse power to drive their machinery, which is furnished by an engine of 80 horse power in an adjacent building. The business was established in 1856 by Howe & Mitchell.

A. J. Tilton occupies a 3 story wooden building, 40x70 feet, in the rear of Merrimac street, for the manufacture of ladies', misses, and children's boots and shoes. He commenced business in 1861, employs 150 hands, and turns out 4,000 pairs per day, and does a business amounting to about $300,000 per year. Office and salesrooms, Nos. 168, 170, 172, and 174 Merrimac street.

Mitchell & Johnson occupy a shop, located No. 152 Merrimac street, for the manufacture of ladies' and misses' machine sewed boots and shoes. They commenced business in 1865, employ 50 hands, and turn out 60,000 pairs per year, worth $100,000.

Farrar Bros. occupy a 4 story brick building, 24x55 feet, also 2 rooms 30x70 feet, in a 2 story wooden building, located Nos. 160 and 162 Merrimac street, for the manufacture of gent's, ladies', misses', and children's boots and shoes, for New England, Southern, and Western trade. They commenced business in 1858, employ 200 hands on the premises, and many others outside, and turn out 150,000 pairs per year, worth about $300,000.

J. W. Vittum occupies a shop, No. 148 Merrimac street, for the manufacture of ladies', misses', and children's boots and shoes. He commenced business in 1859, employs 40 hands, and turns out 100,000 pairs per year, worth $75,000.

C. W. Chace & Co., occupy a four story brick building 50x50 feet, located Nos. 14 and 16 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. They employ 200 hands, and turn out about 200,000 pairs per year, worth about $200,000. The business was established in 1815 by Samuel Chace.

G. A. Green, occupies two floors 22x65 feet, in the Essex Bank block on Merrimac street, for the manufacture of ladies' boots and shoes. Commenced business in 1868; employs 40 hands, and turns out about 400 pairs per day.

J. M. Poor & Co., occupy one floor of a brick building 24x75 feet, located No. 40 Merrimac street, for the manufacture of ladies' and misses' sewed and pegged boots and shoes. They commenced business in 1857; employ 40 hands and turn out about 50,000 pairs per year, worth about $70,000.

Ezra Kelly, occupies a shop located on Fleet street, for the manufacture of lasts. He commenced business in 1834; employs seven hands and turns out about 40,000 lasts per year, worth $15,000.

J. H. Kelly, occupies a shop on Fleet street, manufacturing shoe trees and block holder screws. He commenced business in 1855, and does business amounting to about $2,000 per year.

Moses Robinson, occupies one floor of a two story wooden building, 40x50 feet, located on Fleet street, for the manufacture of dies and iron fences of all kinds. He commenced business in 1868; employs four hands, and does a business of about $10,000 per year.

Brown & Weeks, occupy a two story wooden building, 17x47 feet with an L 17x17 feet, located on Court street, for the manufacture of marble monuments, mantles, tablets, &c. They commenced business in 1847; employ seven hands and do business amounting to about $15,000.

J. F. Bragg, occupies a two story wooden building 36x36 feet, located No. 8 Fleet street, for the manufacture of inner and outer soles, taps and stiffnings. He commenced business in 1852; employs nine hands, and does business amounting to about $25,000 per year.

Moses How occupies a five story brick building, iron front, 25x87 feet, and a three story wooden building, 40x40 ft., located at Nos. 45 and 47 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1841. Employs 200 hands, and turns out about 250,000 pairs per year, worth about $300,000.

Mr. How is one of the most active and enterprising members of the trade. He originated the "ganging" system, and was the first to employ "gangs" in this business at Haverhill. He introduced pateut and enamelled leather work; started one of the first stitching machines ever made, and began the manufacture of machine-made shoes in Haverhill nearly simultaneously with their production in Lynn. He consumes more fine kid than any manufacturer in the United States.

BLANCHARD'S EDGE VARNISH,

A superior article for Boot and Shoemakers' use.

Having been manufactured by the proprietors for the last thirty years, and the constantly increasing demand for the same is a sure guaranty that it is an excellent article. The public must beware of a counterfeit article, headed Baltimore Varnish, as each bottle of his manufacture has the name in full on the label and blown on the glass.

CHARLES BLANCHARD, 118 Merrimac street, Haverhill, Mass.

Agents for the sale of my Varnish—Isaac Colburn & Co., 72 Milk street, Boston; N. H. Myrick, cor. of Union and Buffum streets, Lynn; Richardson & Poore, Stoneham, Mass.; G. H. Farrar, corner Union and Washington streets, Lynn, Mass.; James F. Woodward & Co., South Reading, Mass.

☞ A liberal discount made to the trade.

Charles Blanchard, occupies a shop at No. 118 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. He employs 50 hands, and turns out about 30,000 pairs per year, worth $50,000. Mr. Blanchard is also the manufacturer of the famous Baltimore Edge Varnish for boot and shoe makers' use, of which he manufactures and sells about 800 gallons per year.

The largest shoe manufactory in Haverhill is that of L. Johnson & Co. They employ 350 hands, and turn out $300,000 worth of goods per year. Their product comprises buff and kid sewed boots, and polished leather pegged boots, which are shipped to the south and west.

West & Co. occupy a shop, 25x60 feet, located No. 134 Merrimac street, for the manufacture of women's machine sewed boots and shoes. They employ about 100 hands, and turn out 60,000 pairs per year, worth about $100,000. This firm was established 35 years ago by William N. Kimball.

E. A. Sawyer occupies a shop in a four story brick block No. 70 Merrimac street, for the manufacture of ladies', misses' and children's boots, shoes and slippers. He commenced business in 1863; employs about 50 hands, and turns out about $20,000 worth per year.

R. W. Blaisdell occupies a shop, located at No. 132 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1862, employs 30 hands, and turns out 30,000 pairs per year.

West & Co. occupy a shop No. 134 Merrimac street, for the manufacture of ladies' fine boots and shoes. They employ 100 hands, and turn out 42,000 pairs per year, worth $100,000.

Pathe & Smith occupy a shop, 40x100 feet, located on Fleet street, for the manufacture of paper boxes. They commenced business in 1857; employ six hands, and turn out about 75,000 boxes per year.

J. F. Merrill occupies a shop, No. 130 Merrimac street, for the manufacture of ladies' and gents' slippers, and gents' nullifiers. He commenced business in 1849; employs 30 hands, and turns out about 25,000 pairs per year, worth $18,000.

A. L. Kimball occupies a shop, No. 54 Merrimac street, for the manufacture of ladies', misses', and children's buff and calf balmorals. He employs 50 hands, and turns out 42,000 pairs per year, worth about $75,000. The business was established in 1837 by Albert Kimball.

Poor & Wheeler occupy 2 floors of a 4 story brick building, 24x60 feet, located No. 76 Merrimac street, for the manufacture of ladies', misses', and children's boots and shoes. They commenced business in 1861, employ 100 hands, and turn out 60,000 pairs per year, worth $100,000.

Daniel Harriman occupies a shop, No. 36 Merrimac street, for the manufacture of ladies', misses', and children's boots and shoes. He employs 75 hands, and turns out about 125,000 pairs per year, worth $75,000.

W. B. Lamprey occupies a shop, No. 36 Merrimac street, for the manufacture of ladies', misses', and children's boots and shoes. He commenced business in 1865, employs 25 hands, and turns out 30,000 pairs, worth $25,000, per year.

Ordway & Pike occupy a shop, located No. 76 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1868, employ 30 hands, and turn out 36,000 pairs per year, worth $100,000.

Richardson & Brown occupy a shop, located No. 82 Merrimac street, for the manufacture of ladies' misses', and children's boots and shoes. They commenced business in 1868, employ 25 hands, and turn out 18,000 pairs per year, worth $50,000.

Wm. H. Hewes & Co. occupy 3 floors of a brick building, located No. 72 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1837, employ from 50 to 75 hands, and turn out about 70,000 pairs per year, worth about $50,000.

John Kendrick & Co. occupy a shop 22x50 feet, in Porter's Block, No. 122 Merrimac street, for the manufacture of ladies' and misses' boots and shoes. They commenced business in 1866, turn out about 36,000 pairs per year, and do business amounting to about $60,000.

L. Johnson & Co. occupy a 4 story brick block, 25x115 feet, located No. 84 and 86 Merrimac street, for the manufacture of ladies' and gents' machine sewed and pegged boots and shoes. They do a business amounting to about $325,000 per year. The business was established in 1820 by Leonard Johnson.

G. L. Davis & Co. occupy a shop located No. 52 Merrimac street, for the manufacture of ladies' and gents' fine slippers. They commenced business in 1867, employ 250 hands, and turn out about 240,000 pairs per year, worth about $250,000.

Goodrich & Fitts occupy a 3 story brick building, 22x40 feet, located Nos. 100 and 102 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1865, employ 75 hands, and turn out about 60,000 pairs per year, worth about $100,000.

Warren Ordway and Co. occupy a 4 story brick building, 40x44 feet, located Nos. 96 and 98 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1836, employ about 75 hands, turn out about 70,000 pairs per year, and do business amounting to about $150,000.

J. Gardner & Sons occupy 1 floor in a brick building, located No. 74 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1849, employ from 50 to 75 hands,

and turn out about 60,000 pairs per year, worth about $100,000.

This firm has a branch house in Louisville, Ky., where most of their goods are sold.

WINCHELL BROTHERS occupy a store 3 stories, 24x40 feet, in a brick block, No. 108 Merrimac street, for the manufacture of ladies', misses' and children's, and mens', youths' and boys' boots and shoes, all fine machine sewed. They employ about 175 hands, turn out about 700 pairs per day, and do business to the amount of about $200,000 per year.

S. K. MITCHELL & Co. occupy a store and shop, located No. 80 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1867, employ 50 hands, and turn out about 1,000 cases of boots and shoes per year, worth $75,000.

RUSS & NOYES occupy a shop No. 144 and 146 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1867, employ about 30 hands, and turn out about 36,000 pairs per year, worth about $40,000.

C. F. MORSE & Co. occupy 2 rooms, 24x60 feet, located No. 150 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1858, employ from 75 to 100 hands, and turn out about 50,000 pairs per year, worth about $50,000.

A. S. KELLY & Co. occupy a 3 story brick building, 25x 60 feet, located Nos. 140 and 142 Merrimac street, for the manufacture of gentlemen's lasting gaiters and fancy pumps. They commenced business in 1854. Employ about 50 hands.

FITTS & STOVER occupy a shop located Nos. 88 and 90 Merrimac street, for the manufacture of gents', ladies', misses' and children's boots and shoes. They commenced business in 1865; employ about 75 hands, and turn out about 60,000 pairs per year, worth about $100,000.

S. F. PRESCOTT & DAVIS occupy a 4 story brick building, 24x55 feet, located Nos. 156 and 158 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes.

POTTER & JAQUES occupy a store and shop in Whittier's block, No. 200 Merrimac street, for the manufacture of ladies', misses' and children's fine boots and shoes. They commenced business in 1862; employ about 35 hands, and turn out abut 45,000 pairs per year, worth about $75,000.

J. H. BLAISDELL occupies a shop located No. 172 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1840; employs 20 hands, and turns out about 27,000 pairs per year, worth about $30,000.

G. L. SLEEPER occupies 24x55 feet, in a brick block, No. 164 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1859; employs 50 hands, and turns out about 60,000 pairs per year, worth about $50,000.

CALVIN SMITH occupies a shop in Union block, No. 166 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. Commenced business in 1865; employs 30 hands, and turns out about 42,000 pairs per year.

ORDWAY & FLETCHER, occupy a shop No. 170 Merrimac street, for the manufacture of ladies' misses' and children's boots and shoes. They commenced business in 1869, employ 30 hands turn out about 25,000 pairs per year and do business amounting to about $34,000.

A. H. HERRING, occupies a shop in the Haverhill Bank building, situated on Merrimac street, for the manufacture of slippers, commenced business in 1865, employs 150 hands and does business amounting to $75,000 per annum.

C. O. MCLAIN, occupies a shop No. 170 Merrimac street, for the manufacture of women's boots and shoes. He commenced business in 1865, employs 30 hands and turns out about 36,000 pairs per year and does business amounting to $36,000.

A. T. JOHNSON, occupies a shop No. 128 Merrimac street, for the manufacture of ladies' and misses' boots and shoes, commenced business in 1863.

L. C. WADLEIGH, occupies a wood building 2 stories 25x 30 feet, situated on Mechanics' Court, for the manufacture of boots and shoe lasts. Employs 6 hands, commenced business in 1841, turns out 30,000 lasts per year, and does business amounting to $10,000.

PALMER & COOK, manufacture ladies', misses' and children's boots and shoes, commenced business in November, 1868, located at 51 Merrimac street, employ 20 hands and turn out 500 pairs per week.

E. TIBBETTS, occupies a building situated at No. 51 Merrimac street, for the manufacture of ladies', misses and children's boots and shoes, commenced business in 1867, employs 12 hands, turns out 250 cases per year.

J. B. MORRILL & Co., manufacturers of men's grain, buff, and polished leather and splits, established business in 1853. They occupy a building three stories high, and 60x 40 feet, and employ from 15 to 20 hands. The steam power is furnished from Duncan's Steam Planing Mill.

J. H. HOBSON occupies one room in a brick block, at No. 41 Merrimac street, for the manufacture of women's, misses' and children's boots and shoes. Commenced business 1859; employs 25 hands, turns out 72,000 pairs per year, and does business amounting to $60,000 per annum.

E. EVERSON occupies a 3 story brick building, 55x32 feet, situated in Mechanics court, for the manufacture of boot and shoe machinery. Commenced business 1857; employs 10 hands. His machinery is driven by an engine of 12 horse power, with 1 flue boiler 20 horse power, built by Moses Tuffts, of Boston.

T. BULLEN occupies 2 floors of a wooden building, 2 stories, 50x35 feet, situated on Pleasant street, for the manufacture of shoe nails and tack. Commenced business in 1859. Employs 6 hands, turns out 200,000 lbs. of nails and tacks per year. His machinery is driven by an engine of 80 horse power in building adjacent. Does business amounting to $30,000 per annum.

J. B. RICHARDSON & Co. occupy a wooden building, 3 stories, 50x50 feet, located on Pleasant street, for the manufacture of ladies' and children's boots and shoes. Commenced business in 1860; employ 50 hands, turn out 100,000 pairs per year, and do business amounting to $125,000 per annum.

JOHN M. B. GREEN occupies a one story wooden building 70x60 feet, situated on Fleet street, for the manufacture of wooden boxes. Commenced business in 1865. Employs eight hands; consumes 700,000 feet of lumber, and does business amounting to $30,000 per annum.

H. M. WIGHTMAN occupies 3 floors in a four story brick building, 52x27 feet, located at 30 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. Commenced business in 1851; employs 30 hands, turns out 36,000 pairs per year.

G. H. NICHOLS occupies two floors, each 25x50 feet, in a brick building at No. 41 Merrimac street, for the manufacture of men's boots and shoes. Commenced business in 1838; employs 50 hands; turn out 600 cases per year, and do business amounting to $75,000.

O. S. HUBBARD, occupies a shop 50x24 feet, at No. 132 Merrimac street, for the manufacture of misses and child-

rens boots and shoes. Commenced business in 1867; employs 25 hands.

A. McDuffie, occupies a room 60x24 feet, at No. 154 Merrimac street, for the manufacture of women's boots and shoes. Commenced business in 1862; employs 60 hands; turns out 36,000 pairs and does business amounting to $50,000 per annum.

Foster & Sargent, occupies a shop located at 144 Merrimac street, for the manufacture of ladies' boots and shoes. Commenced business in May, 1868; employs 30 hands; turn out 12,000 pairs, and do business amounting to $20,000 per annum.

Albert Merrill, occupies a room 20x40 feet, located at 128 Merrimac street, for the manufacture of ladies boots and slippers. Commenced business in 1865. Employs 20 hands; turns out 18,000 pairs, and does business amounting to $18,000 per annum.

W. J. Peaslee occupies two floors in a four story brick building, located at No. 71 Merrimac street, for the manufacture of men's, women's and children's boots and shoes. Commenced business in 1865; employs 50 hands, turns out 1,200 pairs per week, and does business amounting to $60,000 per annum.

J. B. Swett & Son occupy a shop, located at 52 Merrimac street, Haverhill, for the manufacture of ladies', misses' and children's calf boots. Commenced business in 1836; employ 100 hands, turn out 70,000 pairs and do business amounting to $100,000 per annum.

Carelton & Co. occupy three rooms, 40x20 feet each, in Porter's Block, No. 120 Merrimac street, for the manufacture of boots and shoes. Commenced business in 1843; employ 40 hands, turn out 36,000 pairs per year, and do business amounting to $60,000.

A. J. Farmington occupies a building situated at 104 Merrimac street, for the manufacture of ladies', misses' and children's shoes. Commenced business in 1865; employs 40 hands, turns out 18,000 pairs, and does business amounting to $25,000 per annum.

Davis Brothers occupy a room 50x22 feet, located at 124 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. Commenced business in 1865; employ 60 hands, turn out 60,000 pairs, and do business amounting to $100,000 per annum.

George Ham, manufacturer of ladies', misses' and children's boots and shoes, commenced business in 1865. He occupies two rooms 75x24 feet, in the four story brick building known as Brickett building, and gives employment to 25 persons.

Brickett & Smith, occupy a room 90x30 feet in Brickett's building, located on Washington Square, where they employ 30 hands in the manufacture of ladies' and gents' fine boots and shoes. The business was established in 1835 by Franklin Brickett, and carried on by the present firm since 1865, who turn out 500 cases of boots per annum and do a business of $60,000.

Fitts & Spaulding, commenced manufacturing ladies', misses' and children's fine boots and shoes in 1852, and have 50 employees. They occupy 3 floors in a 4 story brick building 60x20 feet, located at 190 Merrimac street, and turn out 1,200 cases per annum, doing business of $100,000.

Henry G. Foss, manufacturer of ladies', misses' and children's boots and shoes, occupies a room 45x25 feet, in 4 story brick building located on Washington Square. He commenced business in 1861, employs 16 hands and turns out 350 cases of boots per annum doing a business of $40,000.

S. W. Fitts, occupies a room 25x25 feet in Brickett's building, located on Washington Square and manufactures ladies', misses' and children's boots and shoes, of which he turns out 400 pairs per week, commenced business Jan. 1st, 1869, and has 7 employees.

H. Doton, occupies a room 50x25 feet in Brickett's building, located on Washington Square, for the manufacture of ladies', misses' and children's boots and shoes, of which he turns out 360 pairs of boots per week, employing 15 persons, and doing business to the amount of $12,000 per annum.

Hoyt & Tasker, commenced the manufacture of ladies', misses' and children's boots, shoes and slipers, Dec. 1st, 1868. They occupy a room 40x28 feet in Brickett's building situated at Nos. 5 and 6 Washington Square, and have 15 employees.

Griffin Brothers, manufacturers of ladies', misses', and children's boots and shoes, commenced business in 1866. They occupy 2 floors of a 4 story brick building, 60x22 feet, situated at 178 Merrimac street, have 60 employees, and produce about 1,500 cases of boots per annum, doing a business of $70,000. Their goods are manufactured chiefly for the Western trade.

John N. Sleeper & Co., manufacturers of ladies', misses', and children's fine boots and slippers. They occupy the lower floor of a 4 story brick building, 22x60 feet, situated at 176 Merrimac street. The business was established by J. N. Sleeper in 1856, and has been carried on by the present firm since November 1, 1868, giving employment to 75 persons, and producing 1,300 cases of boots annually, doing business to the amount of $60,000. Their goods are sold principally in the Southern States.

S. G. Chase commenced business in 1868, and employs 14 hands. He occupies a room in Brickett building, located on Washington square, and manufactures ladies', misses, and children's boots and shoes, doing a business of $12,000 per annum.

G. W. Ladd occupies a room, 70x22 feet, located at 82 Merrimac street, and manufactures ladies', misses', and children's boots and shoes. He commenced business in 1868, has 16 employees, and turns out about 225 pairs per week, doing business of $15,000 per annum.

H. O. Whitney commenced the manufacture of paper boxes in 1860. He occupies the third floor of a 4 story brick building, 60x22 feet, situated at 178 Merrimac street, and has 4 employees, producing about 5,000 boxes per month, consuming 2 tons of straw board.

E. G. Tilton occupies the lower floor of a 4 story brick building, 60 x 22 feet, located at 182 Merrimac street, and manufactures ladies' boots and shoes. Commenced business about 1840, has 50 employees, and turns out 600 cases per annum, doing business of $40,000. Goods made principally for the New England trade.

Kimball Brothers, manufacturers of ladies' calf boots, commenced business in 1866, and have 50 employees. They occupy the 3d floor of a 4 story brick building, 60 x 22 feet, located at 180 Merrimac street, and produce annually about 500 cases of boots, doing business of $50,000. Their goods are sold principally in the Western States.

Goodrich & Porter occupy the lower floor of a 4 story brick building, 60x22 feet, situated at 184 Merrimac street, and manufacture ladies', misses' and children's fine boots and shoes, of which they produce 3,000 cases annually; employing 150 hands, and doing business of $200,000. Their goods are sold principally in the South and West.

Beach & Wentworth, manufacturers of soap and candles, commenced business in 1847. Works situated on Mill street. Employ 4 hands.

G. W. NYE & CO.,

IRON FOUNDERS,

—AND—

Manufacturers of Castings of every Description,

MILL STREET, HAVERHILL, MASS.

ORDERS SOLICITED AND PROMPTLY FILLED.

G. W. Nye & Co. commenced business in 1868, manufacture all kinds of iron castings. Foundry situated on Mill street, 1 story, of wood 70 x 50 feet; employ 8 hands; melt about 10 tons iron per month. They do a business of $15,000 per annum.

B. F. Darling commenced the manufacture of ladies', misses' and children's boots and shoes, in 1867. He occupies two floors of a 3 story brick building, 38x20 feet, located at No. 7½ Water street, and has 25 employees. Turns out each week about 1,000 pairs of boots, and does a business of $45,000 per annum.

F. Butters, Jr. occupies a 3 story wooden building, 50x 20 feet, located at 53 Water street, for the manufacture of all kinds of upper leather. He commenced business in 1838, has 10 employees, and turns out about 150 sides of leather per week, doing business of $50,000 per annum.

Balcom Bros., manufactures of ladies', misses' and children's boots and shoes; occupy a room in a 4 story brick building, located at No. 210 Merrimac street. Have 3 employees, turning out 1 case per week.

John E. Gale. In 1861, Mr. G. commenced the manufacture of ladies', misses' and children's calf and buff, pegged boots and shoes. Occupies two floors of a four story building 60x20 feet, located at 206 Merrimac street; employs 75 hands, and does a business of $100,000 per annum.

B. & B. M. Kimball, commenced business in 1857, as manufacturers of goat, kid and morocco leather, occupying a five story frame building 100x25 feet, located on Washington street; employ 25 hands producing 100 skins weekly. The business was established in 1838 by Benjamin Kimball. Office, 33 Pearl street, Boston.

Ayer Brothers, occupy a frame building 42x42 with an L 50x20 feet, located on Washington street, also a two story frame building 30x30 feet, used as a trimming shop, the latter building is situated near the Boston and Maine Railroad. This firm manufactures woolen hats of various colors; commencing the business in 1864; employ 70 hands, turning out daily between 50 and 60 dozen hats.

At their mill on Washington street they have five sets of cards with the necessary machinery adapted to this kind of goods. Have an engine of twenty-five horse power for driving machinery, with two tubular boilers built by Chubbuck & Sons, of Boston.

G. & J. C. Corning, commenced business at 196 Merrimac street, in 1858, manufacturing ladies', misses' and children's pegged boots and shoes; occupying the upper floor of a four story building 70x25 feet. Have 30 employees, and do a business of $40,000 per annum.

D. B. Foster & Co. occupy the lower floor of a 3 story frame building, 100x35 feet, situated on Washington street, for the manufacture of ladies', misses' and children's boots and shoes. Commenced the business in 1865; employ 15 hands, turn out 600 cases per annum, business amounting to nearly $36,000.

Charles W. Offutt, commenced business in 1867, manufacturing ladies', misses' and children's boots and shoes, occupying a room in building located an No. 196 Merrimac street, and employing 15 hands, turning out 300 cases per month.

J. B. Nichols & Co., manufacturers of ladies', misses', men's, boys' and youths' boots and shoes. Commenced business in 1837. This firm occupies a first floor of a 4 story building, 70 x 25 feet, situated at No. 192 Merrimac street; employ 50 hands; do a business of $50,000 per annum.

L. A. Tenney commenced the manufacturing of ladies', misses' and children's boots and shoes in 1860, at No. 188 Merrimac street, occupying 2 floors in a 4 story brick building, 60x20; employs 75 hands. Does business to the amount of $100,000 per annum.

S. H. Gale commenced business in 1864, at No. 204 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes. Occupies 2 floors, 60 x 20, in a 4 story brick building; has 50 employees, and turns out 1,000 cases boots per annum.

H. P. Davis occupies a room in a 4 story building, situated at No. 194 Merrimac street, for the manufacture of ladies', misses', and children's boots and shoes, employs 17 hands, and does a business of $20,000 per annum. Business commenced by Mr. Davis in 1858.

J. H. Robinson occupies a room in a brick building, situated No. 194 Merrimac street, where he commenced in 1867 manufacturing ladies', misses', and children's boots and shoes, employs 10 persons, making on an average 6 cases shoes per week.

Huntington Bros. manufacture ladies' and misses' fine machine sewed boots and shoes and slippers, occupying a room in building situated at 194 Merrimac street. They have 45 employees, turning out 600 cases boots per annum, doing a business of $45,000 per annum.

S. D. Maynard occupies 3 floors of a 4 story brick building, located at 212 and 214 Merrimac street, for the manufacture of men's, boys', and youths', ladies' and misses' plain and fancy slippers and buskins. Commenced business in 1858, has 250 employees, and does a business of $150,000 per year.

S. & G. Elliott commenced business in 1843, at No. 12 Merrimac street, for the manufacture of ladies', misses', and children's boots. Employs 75 hands, and produces 1,500 cases per annum.

George & Moody commenced business in 1867, for the manufacture of ladies' and misses' fine boots and slippers; occupy two floors in a building located at No. 202 Merrimac street; employ 30 persons. The business amounts to about $75,000 per annum.

D. B. Cluff occupies the lower floor of a four story brick building, 70x20, located at No. 198 Merrimac street, for the manufacture of men's, ladies', misses' and children's boots and shoes. Business commenced in 1868; has 75 employees,

and turns out 1,200 cases boots per year; doing a business of $120,000 per annum.

A. Whittier occupies a two story frame building, 90x40, ell 34x20, situated on Washington street, near the Boston and Maine depot. Mr. W. commenced in 1848 to manufacture carriages. Employs 25 hands; does a business of $20,000 per annum.

M. M. Ridgway and C. A. Webster, together, occupy one floor in a four story brick building, located at No. 210 Merrimac street, for the manufacture of ladies', misses' and children's boots and shoes; each hiring 25 employees, and turn out 350 cases boots per week.

W. S. Perley manufactures ladies' and misses' boots and shoes; commenced business in 1861, at No. 196 Merrimac street. Has 15 employees, turning out 300 cases per annum.

How & Tibbetts, commenced business in 1868, manufacturers of ladies', misses' and children's boots and shoes, occupy 2 floors of a 4 story frame building, located in Washington Block, Washington Square, have 35 employees, turning out 20 cases boots per week, doing a business of $75,000 per annum.

Ira O. Sawyer, commenced business in 1868, manufacturing ladies', misses' and children's boots and shoes. Mr. S. occupies the first floor of a 3 story frame building, situated on Washington street, has 15 employees, turning out 400 cases boots per annum. Does a business of $28,000 per annum.

Wise & Richards, occupy a room 40x24 feet, in a three story frame building, located on Washington street, for the manufacture of ladies', misses' and children's boots and shoes. Commenced business in 1869.

Leighton & Gage, manufacturers of ladies', misses' and children's boots and shoes, both pegged and sewed, commenced business in 1862, at No. 228 Merrimac street, in a 2 story frame building 60x20, have 40 employees, turning out 500 cases per annum, do business to the amount of $75,000.

S. B. Prescott, & Co., occupy a floor of a 4 story brick building, located at No. 210 Merrimac street, for the manufacture of hand made ladies', misses' and children's boots and shoes, business established by them in 1858. Have 30 employees, do a business of $30,000 per annum.

Geo. W. Day, commenced the manufacture of ladies', misses' and children's boots and shoes in 1864. Occupy a 4 story brick building 65x25, located in Washington Block, Washington Square. Employs 70 hands and produce 1,200 cases boots per annum. Goods manufactured for the Western and Southern trade.

Chase & Laubham, occupy a 5 story brick building 80 x28 feet, located on Washington Square. Messrs. C. & L. commenced in 1861, to manufacture ladies', misses' and children's sewed and pegged boots and shoes, employ 90 hands, turning out 50 cases per week. Run au engine of 5 horse power.

D. D. Flanders, manufacturer of ladies', misses' and children's pegged boots and shoes. Made principally for the Southern and Western trade. Occupies the second floor of a 4 story brick building, located at 180 Merrimac street. He commenced business in 1850; has 40 employees, and produces about 600 cases per annum; doing business of $50,000.

C. T. Chase commenced manufacturing ladies', misses' and children's boots and shoes in 1864. He occupies the lower floor of a 3 story brick building, located at No. 7 Merrimac street, employing 50 persons, and producing about 15 cases of boots per week, doing business to the amount of $25,000. Goods made principally for the Southern and California trade.

S. M. Currier occupies 2 floors in a 4 story brick building situated on Washington square, and manufactures men's, ladies' and misses' boots and shoes, of which he turns out annually about 1,000 cases, doing a business of $80,000. Commenced business in 1860, and has 50 employees. Goods made principally for the Southern and Western trade.

Kelly & Blaisdell occupy 2 floors of a 4 story brick building 60 x 22 feet, located at 186 Merrimac street, and manufacture ladies', misses' and children's buff and calf boots and shoes. They commenced business in 1862; have 50 employees, turn out 1,000 cases per annum, doing business of $100,000. Their goods are sold principally in the Western and Southern States.

J. A. Gage commenced manufacturing misses' buff boots and shoes in 1866, and employs 15 persons. He occupies 1 floor in a 4 story brick building 60x22 feet, situated at 186 Merrimac street, and produces 300 cases per annum, doing business of $20,000.

J. M. Stover, manufacturer of ladies' boots and shoes, commenced business in January, 1869. He occupies the second floor of a 3 story wooden building, 60x25 feet, and manufactures goods chiefly for the Western trade.

The hat factory, long carried on by How & Mitchell, is now in the hands of Butters & Rust, who are likely to maintain its ancient reputation unimpaired. The main building is 120x42 feet, and 4 stories. The firm are now running 6 sets of wool cards, and a proportionate amount of other machinery. The facilities of the establishment have been greatly improved by its new owners. They employ over 60 hands in the manufacture of black wool hats, of which they can turn out 100 dozen per day. The proprietors, in common with other hat manufacturers, anticipate a lively business during this year, and are admirably prepared to deal with it.

The old woolen mill, built by Ezekiel Hale in 1806, is now occupied by Stevens & Co., his successors. They employ 50 hands and run 26 looms and 1,620 spindles in the manufacture of all wool flannels.

T. Grieves & Co. employ 20 to 25 hands in the manufacture of carriages. They also make a few sleighs for local customers.

Haverhill Bridge, A flag station on the Haverhill Branch of the Newburyport Railroad, about two miles from Haverhill.

Haydensville, $1\frac{1}{4}$ miles from Williamsburg and $6\frac{1}{4}$ from Northampton. A small manufacturing village on the Williamsburg Branch of the New Haven and Northampton Railroad.

The Hayden Manufacturing Co. are engaged in the manufacture of cotton sheetings. They have a fine brick mill of four stories and basement, one cotton house, one boiler house, and one water and gas house. They employ 80 hands, and turn out 21,000 yards of sheeting per week, requiring 6,600 lbs. of cotton. There are 100 looms and 4,500 spindles. A 75 horse power engine, built by Harrison Loring, and two tubular boilers, are used. Also, two turbine wheels, one being 30 horse, and the other 40 horse power, and measuring 26 and 30 inches, respectively.

G. & J. Hayden's Foundry and Machine Shop is situated here. The main building is of wood, two stories, 76x 40 feet. The second building, which is used for engine and boiler room, is 30x40. The number of employees is 40, who are engaged in the manufacture of reaming lathes and screw

machines for brass work, steam pipe, plumbers' fittings, machine works, and shafting of every description.

HAYDEN, GERE & CO. This company is noted for the variety, quality and great quantity of goods annually made by them. All kinds of brass goods for plumbers, gas and steam-pipe fitters and engine builders are made here in perfection. It is interesting to see the immense amount of goods that is continually being forwarded to their warehouse at 84 Beekman street, New York, as well as the quantity sent to various parts of the country, to Cuba and South America. They have some 200 hands engaged in the various kinds of work, and are continually adding thereto, and improving their property, thereby enhancing the value of the surrounding district. The works consist of brass foundries, factory, machine shops, carpenter shop, pattern shop and office, and embrace an extensive area. The business constantly increasing, will cause valuable additions to be made from time to time. The main building which is built of brick and three stories high, is 50x35 feet. The pattern shop 20x40 feet, is of wood, 2 stories high. The machine shop 20x45 feet and two outside buildings used for various purposes 50x30 feet and 25x45 feet respectively.

HEBRONVILLE, about 35 miles from Boston and 8 from Providence, on the Boston & Providence Railroad; a manufacturing village.

HEBRON MILLS. These mills were built by Messrs. B. B. & R. Knight about the year 1853, for the manufacture of shirtings. The number and dimensions of the buildings are as follows: No. 1, main building, 3 stories, 100x50 feet, with wing 100 x60; No. 2, 3 stories, 120x54; No. 3, cloth room, 2 stories, 40x45; No. 4, boiler house, 60x40; No. 5, blacksmith shop, 20x16; No. 6, waste house, 40x25. All the buildings are built of brick. This company run 364 looms, and 15,000 spindles; consume over 1,400 bales of cotton and 1,500 tons of coal per year, and produce 40,000 yards of shirtings known as "Fruit of the Loom," per week. They employ about 300 hands. Power is furnished by a steam engine manufactured by "Corliss Steam Engine Co." of Providence, R. I., and is of 200 horse power; also, 1 breast water wheel of 100 horse power. The office of this company is situated at No. 26 Exchange place, Providence, R. I.

HIGHLAND, 7 miles from Boston, a country station, on the Dedham Branch Railroad, in the town of West Roxbury.

HIGHLANDVILLE, 11¼ miles from Boston, and 26¼ from Woonsocket, a flag station on the Woonsocket division of the Boston, Hartford, and Erie Railroad.

HINGHAM, 17 miles from Boston, on the South Shore Railroad, a pleasant village containing 7 churches, "Old Colony Lodge" of Masons, and the Drew House, Phineas Drew, proprietor, who formerly kept the Nahant Hotel, Nahant, Sturtevant, East Boston; Norfolk House, Roxbury, and originally connected with Tremont House, Boston. *The Hingham Journal* and *South Shore Advertiser* are published here; population of the town, 4,300. This place is quite a summer resort of the Bostonians, and is remarkable for its healthiness and longevity. During 50 years 8 persons died in one house, whose average age was 84 years.

HINGHAM CORDAGE CO. was established in 1853. They occupy a brick building, 120x40 feet, 3 stories; a wooden building, 1,000x17 feet, 2 stories, and employ 85 persons manufacturing cordage. They are capable of producing 100 tons per month. A 150 horse power Corliss engine supplies the power.

HUTCHINS & CLOODMAN commenced business in 1863 for the manufacture of boots and shoes. The building occupied by them measures 30x40 feet. They employ 40 hands, produce 60 pairs of boots and shoes daily, and do a business of $40,000 annually. Their manufactory is located at Hingham Centre.

HINSDALE, 143 miles from Boston, and 57 from Albany. A village and township on the Boston and Albany Railroad. The village has three churches and about 1,000 inhabitants. This town is the source of a branch of the Housatonic, elevated and adapted to grazing.

F. W. HINSDALE & BROTHER commenced business in 1860, as manufacturers of beaver, moscow and castor goods which was established by Hinsdale & Richards in 1854. Their factory is three stories 45x143 with attic; office and packing room 35x40 feet, two stories; boiler-house 40x35 feet, three stories; also engine and dry-house. Their engine was built by the Western Iron Works of Newburg, is of 80 horse power, which they run in connection with a 100 horse power overshot wheel, from which they derive their motive power; three tubular boilers made by Pitkin Brothers, of Hartford. This firm employ 110 hands and turn out 7,000 yards double width per month, from off six set woolen machinery.

M. M. WATKINS occupies a 2 story building 60x106 feet, for the manufacture of machinery of various descriptions, and all kinds of castings. The power is supplied by a Yankee turbine wheel, under 26 feet fall, assisted by a 10 horse power engine. He consumes 4 tons iron per week; employs 6 hands, and does a business of about $25,000 per annum. The manufactory is located ½ mile from Hinsdale depot.

AT CUNNINGTON, reached from this depot, is the establishment of J. L. ABELL, who established business in 1867. He occupies the second floor of a 2 story building, for the manufacture of chewing and smoking tobacco; employs from 15 to 20 hands, produces about 6,000 boxes per year, and does a business of $12,000. Mr. A. is also connected with Mr. Orcutt, in the firm name of Orcutt & Abell, who occupy the first floor of same building, for the manufacture of scythe stones.

SILAS BINGHAM, manufacturer of timber for hay cutters, corn shellers, hay Tedders, &c.; also, of cribs, cradles, &c. Established business in the year 1860. The buildings are 24x36 feet and 16x18 feet. He employs from 4 to 8 hands, doing a business of $4,500 per year. The power is furnished by a 15 horse power water wheel.

HOLLISTON, 26 miles from Boston, and 28 from Worcester, a village and town on the Milford Branch of the Boston and Albany Railroad. This town was first settled in 1710, incorporated 1724, and watered by the Charles river. The village has five churches and a population of 2,300.

C. D. HEATH, occupies a 3 story wooden building 30x50 feet, located on Elm street, for the manufacture of men's and boy's boots, commenced business in 1863, employs 30 hands, turns out 200 cases of boots per month, consumes

600 sides of leather per month and does a business of $60,000 per annum.

Payson & Cutter, occupy a 3 story wooden building 40x242 feet, the manufacture of chestnut, black walnut and oak, doors, pews, sheathing, mouldings and finishing materials, commenced business 1865, employ 30 hands, is run by a 40 horse power engine. 1 boiler made by McKay & Aldus of East Boston, does a business of $100,000 per annum.

P. R. Johnson, occupies a 3 story wooden building, located on Elm street, commenced business 1858, for the manufacture of men's, boy's and youths' boots, employ 50 hands, turn out 300 cases per month, consumes 800 sides of leather per month, and does a business of $70,000 per annum.

F. C. Currier, occupies a 3 story wooden building 35x40 feet, located on Central street, for the manufacture of calf and kip boots. Commenced business in 1866, employs 40 hands, turns out 35 cases of boots per week. Does a business of $40,000 per annum.

W. H. Draper occupies a three story wooden building 30x42 feet; also, a three story wooden building adjacent, 22x29 feet, located on Winthrop street, for the manufacture of boots and shoes. Commenced business in 1862; employs 50 hands, turns out from 80 to 100 cases of boots and shoes per week, and does business to the amount of $75,000 per annum.

F. A. Stone occupies a 2½ story wooden building, 40x80 feet, located on Winthrop street, for the manufacture of boots. Commenced business in 1861; employs from 40 to 50 hands, turns out 80 cases of boots per week, and does a business to the amount of $60,000 per annum.

Alden Leland occupies a three story wooden building 35x50 feet; also, a two story wooden building, 22x32 feet, located on Elm street, for the manufacture of boots and brogans. Commenced business in 1838; employs 50 hands, turns out 75 cases of boots per week, and does business to the amount of $120,000 per annum.

Padelford & Wallace occupy a three story wooden building, 40x76 feet, located on Spring street, for the manufacture of men's, boys' and youths' boots. Commenced business in 1864; employ 50 hands, turn out 90 cases of boots per week, consume 270 sides of leather per week, do a business of $100,000 per year.

Slocum & Thompson occupy a three story wooden building, 36x56 feet, with a wing 20x60 feet, located on Elm st., for the manufacture of straw goods. Commenced business in 1863; employ from 500 to 600 hands, turn out during the busy season from twelve to fifteen thousand hats per week.

D. T. Ballou occupies a 4 story wooden building, 28x62 feet, located on Winthrop street, for the manufacture of boots and shoes. Commenced business in 1862, employs 75 hands, turns out 75 cases of boots per week, and does a business of $60,000 per annum.

S. Wilder & Co. occupy a 2 story wooden building, 32x52 feet, located on Washington street, for the manufacture of copper pumps. Commenced business in 1843, employ 14 hands, and turn out 500 pumps per month. Consume 1½ tons of iron, 1 ton of copper, ½ ton of brass, 1,500 lbs. lead and tin, and 150 sides of leather per month; use a 6 horse power steam engine, made by Putnam Machine Co., of Fitchburg, Mass.; use 1 boiler, made by Allen & Endicott, of Cambridgeport, Mass.; do a business of $40,000 per year.

Eagle Ratchet Co. occupy a 2 story brick building, 40x60 feet; commenced business in 1857 for the manufacture of rachet drills and hat machinery. Employ 5 hands, turn out 6 dozen drills per month, and do a business of $15,000 per year.

William S. Batchelder occupies a three story wooden building 60x40 feet, located on Washington street, for the manufacture of boots and shoes of all descriptions. Commenced business in 1828; employs 50 hands, turns out 60 cases boots and shoes per week; does a business of $75,000 per year.

W. H. Hopkins & Co. occupy a 2 story building 25x30 feet, located on Exchange street, for the manufacture of boots and shoes. Commenced business April 1st, 1868. Turn out 40 cases of boots per week, and employ 30 men. Office in Boston, 52 Milk street.

G. T. & A. C. Daniels occupy a 3 story wooden building 32x66 feet, located on Central street, for the manufacture of boots and shoes. Commenced business in 1846; employ 100 hands; turn out 100 cases of boots per week, and do a business amounting to $100,000 per annum.

N. N. Hildreth occupies a 2 story wooden building 30x50 feet, loented on Church street, for the manufacture of men's, boys' and youths' thick and kip boots. Commenced business in June, 1865; employs 50 hands, turn out 200 cases of boots per month. Does a business of $48,000 per annum,

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Holyoke. 8 miles north from Springfield, a village and town on the banks of the Connecticut river, and on the Connecticut River Railroad. The village is built almost entirely on very level ground, which gives it the appearance, to a great extent, of some of the Western villages. The village offers unusual inducements to manufacturers, owing to the unlimited amount of water power afforded by the Chicopee river, which at this place is a large and powerful stream. The churches are 6 in number, of the following denominations, viz.: 1 Congregational, 2 Baptist, 1 Episcopalian, 1 Methodist, and 1 Catholic. Population of the town about 10,000.

Hampden Paper Co. This company was incorporated in September, 1864, with capital stock of $60,000. They manufacture collar, writing, and fine book papers. The buildings are 7 in number, of the following dimensions:—1st, 40x96 feet, 3 stories and basement; 2d, 84x122 feet, 3 stories and basement; 3d, 25x80 feet, 1 story; 4th, 28x52 feet, 2 stories; 5th, 20x35 feet, 1 story; 6th, 32x104 feet, 1 story and basement; 7th, 24x92 feet, 1 story. The machinery consists of three 72 inch Fourdrinier, 19 rag engines, of 500 lbs. capacity each, 2 Jordan engines, 7 finishing calenders, and 3 trimmers and presses. Motive power is furnished by 7 turbine water wheels, of the following dimensions—of 12, 15, 25, 35, 80, 100, and 250 horse power each, making a total of 517 horse power. Amount of paper made per day is 6 tons, valued at $2,500, requiring 10 tons of rags, and the consumption of 6 tons of coal per day, and giving employment to 185 hands. John C. Newton, treasurer.

Holyoke Machine Co., was incorporated in 1863, and carries on the manufacturing of shafting, gearing, mill work, machinists' tools, turbines, as well as water wheels of a cheaper grade. The company own an extensive and constantly increasing lot of patterns, and keep a large foundry in full operation. Paper machinery is also extensively manufactured, including engines, dusters, calenders, trimming and stamping presses, ruling machines and hydraulic presses of from fifty to five hundred tons lift. The shop buildings are compactly built of brick, and occupy the square between Main, Sargent and Race streets, with a branch railroad track into the yard. The works are well equipped throughout with the best light and heavy machinery, and driven by a water wheel of 150 horse power, fed from

the middle level canal, being centrally located among numerous manufacturing establishments, a large amount of their repair work is done by the company in addition to its other business. Mr. Whiting, the well known paper manufacturer is Treasurer of the company and J. Buckland, agent.

T. S. Norton & Co., manufacture all kinds of hammers and hand vises. This company was established in April, 1866, and occupy 2 rooms in Mount Tom Paper Company's brick building, one of which is 80x40feet and the other 40 x20 feet. Number of employees 12. Power is furnished by Mount Tom Paper Company.

Whiting Paper Co., manufacturers of all kinds of first class paper. This company was incorporated in March, 1865, with a capital of $100,000. The main building, which is a four story brick building, is 280x45 feet. They use 6 engines, 4 of which have a capacity of 800 pounds and 2 of 1,300 pounds, 6 calenders, 2 Fourdriniers, both being 62 inches wide, the whole having a capacity of 3½ tons of paper per day, requiring some 4 tons of rags, and giving employment to 180 hands. There are 2 boilers built by Rice, Burton & Fales of Worcester, and 1 steam engine of 18 horse power; also 3 turbine wheels of 240 horse power.

Valley Paper Co. manufacture superior writing, ledger and envelope papers. This company was incorporated in July, 1866, with a capital of $25,000, and occupy a brick building 120x50 feet, 4 stories, and 2 ells, the first being 30 x80 feet 2 stories, and the other 30x40 feet 4 stories, all being of brick. The principal machines are 6 engines, 4 calenders and 1 Fourdrinier, using 2 tons of raw stock per day, and employing 120 hands. Motive power is furnished by 3 Tyler turbine wheels of 185 horse power. This company have recently bought a mill site for a new mill of the same capacity as the one now used.

Riverside Paper Company. This company is extensively engaged in the manufacturing of superior animal-sized envelopes, colored flat-caps, writing papers of every variety and description, and occupy a three story brick building 160x50 feet with an L 100x30 feet, one story. They use 6,000 pounds of stock per day, producing some 4,000 pounds of finished paper, and giving employment to 120 hands. They have running four engines of 600 pounds capacity, and two of 800 pounds; one 72 inch Fourdrinier machine; five calenders, two hydraulic presses; two trimmers. The factory is driven by water power; three wheels, one of which is five feet and the others two and three feet; also use two steam boilers. Near the factory is a large boarding house which accommodates 75 boarders and four tenants; three stories and attic.

New York Woolen Company. This company was incorporated and commenced operations in 1865, with a capital of $150,000. Their buildings consisting of a first-class mill building 150x50 feet, four stories, of brick, with picker-house, dye-house, wool-house and other outside buildings. They run eight sets of cards, 4,800 spindles, and 48 looms; employ 125 hands and manufacture about 5,000 yards fancy cassimeres per week. The motive power is furnished from a 90 horse Tyler wheel.

For the accommodation of their help they have built 20 tenement houses and two boarding houses.

Four miles of cotton goods are turned out at the Lyman Mills daily. These mills run 52,000 spindles and 1,168 looms, and give employment to 1,200 hands, whose monthly pay-roll amounts to $30,000.

Hampton Mills, established in 1852, occupy two mills; one, 200x70 feet, and the other 90x45 feet; also, a dye-house, 140x60 feet, and manufacture ginghams, cottonades, and dress goods, employing 600 persons. Run 475 looms, and 16,000 spindles, and produce 3,000,000 yards of cloth per annum; consuming 1,250,000 lbs. of cotton, and doing a business of $800,000. Their motive power is derived from three turbine water wheels, the fall being 20 feet. C. W. Loring, of Boston, is treasurer, and John E. Chase, agent of the company. The selling agents are, Patrick T. Jackson, of Boston, and Chase, Stewart & Co., of New York.

Merrick Thread Co. was incorporated January, 1866, with a capital of $350,000. The business was first started in 1860 by Merrick Brothers & Co., and changed to Merrick Thread Co., January 6th, 1866. The main building is built of brick, 206x66, four stories in height, with an ell 325x30 feet, two stories. Office 40x20, one story, brick, and boiler room and other buildings, consisting of some 200 feet; the whole forming four sides of a square. Employ 350 hands, run 9,006 spindles, consume 4,500 lbs. stock per week, and produce 65,000 dozen thread per month. Three Collins's turbine water wheels of 100 horse power are used to drive the machinery. Also, have two tubular boilers for heating the mill. This company are running in connection with the above, a small mill at North Windham.

The Holyoke Paper Co. was incorporated in May, 1857, for the purpose of manufacturing writing paper. They have a capital of $600,000. The main building occupied by them is 4 stories high and 280x54 feet. The first L is 160x50 ft. and 4 stories in height; the next L is also 4 stories in height and 56½x58 feet; another L is 72x90 feet, 1 story, and the fourth L is 1 story high and 36 x 80 feet. They consume 2,200 tons of paper and 1,800 tons of coal per year, and manufacture 1,500 tons of paper. The power is derived from a 360 horse power engine. They also use iron turbine wheels. They have 3 machines, 18 engines, 3 rotary and 4 steam boilers.

Parsons Paper Co. commenced business in 1853, for the manufacture of paper. Building 180x60 feet, with wing 80 x50; employ 170 hands and produce about $500,000 worth of paper per year. J. C. Parsons, Agent.

Mount Tom Paper Co. was incorporated December 5th, 1866; have one 4 story building 40x135 feet, with an L 80 x25 feet. They employ about 20 hands, manufacture white and colored tissues, producing about 36,000 reams per annum. They have 34 feet fall of water, of 130 horse power. They use 4 engines, 1 machine, 1 rag boiler, 1 steam boiler and 1 prew. The engines were manufactured by Goddard & Rice, Worcester; machines by Smith, Winchester & Co., South Windham, Conn., and the steam boiler was made by South Norwalk Iron Co. E. Chase, President; C. L. Friuk, Treasurer.

South Hadley is situated across the Connecticut river, and is quite a manufacturing village. Mount Holyoke Female Seminary is situated here, and incorporated in 1836, designed to accommodate 250 young ladies.

The following manufacturing concerns are located here:

Hampshire Paper Co. manufacture first-class writing paper. The company was incorporated in 1866, with a capital of $200,000. The factory is built of brick, 50x120 feet, 5 stories on the back, and 3 stories front, and has 2 L's, 70x28 feet each, 2 stories on the back, and 1 front, both L's built of brick. About 5,000 lbs. of rags are used per day, producing 4,500 lbs. of paper. The machines in use are 6 Jones machines of 600 lbs. capacity each; 2 Fourdrinier machines, Severies maker, Worcester; 5 calenders, and 2 rotary bleachers, of 3,600 lbs. capacity each. They employ 130 hands, and use water power, having 3 turbines, made by the Ames Manufacturing Company, of Chicopee, and 2 tubular boilers. A spring of water of excellent quality for paper massing purposes, is brought 1¼ miles in pipes to the factory, at a cost of $20,000.

GLASGOW Co. manufacture ginghams and fine writing paper. This company was incorporated in 1849 with a capital of $350,000. There are six buildings, as follows: No. 1, the main building, 200x50 feet, 6 stories high; No. 2, the drying house, 80x60 feet, 1 story; No. 3, picker house, 50x30 feet, 3 stories; No. 4, finishing room, with ell 50x50 feet; No. 5, cotton house, 2 stories 20 feet square; No. 6, boiler house and gas house, adjoining each other, 60x30 feet, 1 story; No. 7, coal house, 40x30 feet, 1 story; No. 8, store house, 64x48 feet, 2 stories. The company own a hotel and 37 houses having 91 tenements. There are 500 employees who are running 341 looms and 10,000 spindles. The amount of stock used per week is 35 bales, averaging 450 pounds per bale, and producing 60,000 yards. They use a turbine wheel made by the Ames Manufacturing Co., Chicopee; also use 2 tubular boilors and have 2 flue boilers as a reserve in case of necessity.

CAREW MANUFACTURING Co. manufacture fine writing paper. This company was established in 1848. Capital, $35,000. J. Carew, Treasurer. Their works are situated at South Hadley Falls, where they have a 2 and 3 story building 260 feet in length. Employ 70 hands. They consume 400 tons stock per annum, producing 300 tons paper. Their machinery consists of 6 paper engines and 1 Fourdriner machine. The mill is supplied with wash water from 2 artesian wells,—one 90 feet deep, the other 250 feet deep,—producing a continual stream of 200 gallons of water per minute, pure as crystal; adding greatly to the quality of their highly celebrated papers.

HOOSAC TUNNEL, 86 miles from Fitchburg and 136 from Boston, at present the terminus of the Vermont & Mass. Railroad. The village is situated in a valley at the foot of the Green Mountains and on the Deerfield river. It derives its name from the tunnel which is being bored through the mountains here. A large machine shop is located here, filled with machinery necessary for making drills for boring the tunnel. There are three air compressing machines for driving the drills, and one air machine for furnishing fresh air for the workmen, driven by turbine wheels; 850 horse power wheels furnish the power for driving them. The village contains about 200 inhabitants, besides 500 workmen engaged in the tunnel. There are two sets of hands working alternately from 12 o'clock Sunday night to 12 o'clock Saturday night. The scenery in passing over these mountains, especially from here to North Adams, is sublime, by some thought to exceed that of the White Mountains. The State has built a dam here at a cost of $250,000.

HORN POND, 9½ miles from Boston, a station in the town of Woburn, on the Woburn Branch Railroad.

T. T. COFFIN, commenced business in 1853, for the manufacture of tanners and curriers tools. His shop situated near the depot is 40x26, 2 stories, employs 5 hands, and does a business of about $7,000 per year. His machinery is driven by an 8 horse power portable engine made by the Lowell machine shop.

M. A. TYLER & SON, commenced business in 1868, to manufacture ladies', misses' and children's boots and shoes. The business was established in 1851, by Mr. A. Tyler, who commenced the business in a small way, making goods expressly for the New England trade. They have continued making New England goods and have increased their business considerably, employing 40 hands, occupying a 2 story frame building 44x32, situated on Main street. They turn out on an average of 15,000 pairs shoes per year.

E. CUMMINGS & Co. This firm commenced the carrying of polished, grain, dull and smooth grain, and split leather in 1868. The business was established in 1863 by E. Cummings. They occupy 3 buildings situated on the right side of the track. Their main building is 100x30, 2½ stories, with wing 50x40, 2½ stories, and coal shed, 30x30, holding 60 tons of coal, engine and boiler house, 40x10, 1 story brick, containing a 20 horse power engine, with tubular boiler. They employ 35 hands, and finish 500 sides per week, besides 1½ tons split leather. They consume 150 bales Gambia, 100 bbls. oil, and 200 of tallow per year.

HOUSATONIC, 168 miles from Boston, 66 from Albany, 76 from New York, 89 from Bridgeport and 24 from Pittsfield. A village of about 1000 inhabitants, containing one church, and located in the town of Barrington, Berkshire county.

OWEN PAPER Co., incorporated in 1862 with a capital of $60,000; H. D. Cone, treasurer, for the manufacture of all kinds of writing paper. Their building is 250x50, two stories, divided into office, finishing machine, and engine rooms; employing 110 hands. Using about 12,000 lbs. rags per week, and turning out 2,500 lbs. paper per day. Motive power derived from four turbine wheels.

WAWBEEK MILLS, incorporated in 1866 with a capital of $70,000 for the manufacture of cotton warp. The officers of the company are, George Coffing, president; J. M. Seeley, treasurer. Factory building built of brick 100x50 feet, three stories; employs 70 hands, and runs 4,000 spindles, using 6,000 pounds cotton per week. This company derives its motive power from two turbine wheels Lefel's patent, of 60 horse power, using one of Clary, Sedgwick & Russell's tubular boilers.

MONUMENT MILLS, established in 1852, by Messrs. Coffing, Russell & Woodruff, with a capital of $50,000, appointing J. C. Russell, president; J. M. Seeley, treasurer, for the manufacture of cotton warp. Their factory is 158x41 feet three stories, running 5,000 spindles; employing 110 hands, and using 35,000 pons of cotton per month. Their motive power consists of a 170 horse power turbine wheel, Lefel's make, 56 inch, with 18½ feet fall; two tubular boilers made by Clary, Sedgwick & Russell, and A. Lang, of Pittsfield, Mass.

HOWLANDS, 12 miles from New Bedford, a country station on the New Bedford and Taunton Railroad.

HUDSON, 34 miles from Boston, a country station on the Marlboro' Branch Railroad.

HUNTINGTON, situated 119 miles from Boston, and 81 from Albany, on the Boston and Albany Railroad, has about 600 inhabitants and 2 churches.

LITTLE & STANTON commenced business in 1866 for the manufacture of woolen flannels; occupy a 3 story building, 60x80 feet, with an L, 60x40 feet, 1 story, and bleach house, 15x28 feet, 1 story. This firm run 3 set woolen machinery, employing 40 hands, and turning out 1,500 yards flannel per day.

The motive power is furnished by a 50 horse power breast wheel. They have in use one of Woodruff & Beach's flue boilers.

The Huntington Manufacturing Company, incorporated in 1867, capital $75,000. A. Bedford, president; A. J. Stanton, treasurer; W. A. Little, agent, for the manufacture of dress goods and bed spreads, in a 3 story building, 70x30; bleach house, 42x40, 1 story; boiler and engine house, 20x32, 1 story. The engine, a 20 horse, built by Tufts, of Philadelphia, in connection with a 42 horse power turbine wheel, furnishes power for the works. The boilers, 2 flue, were built by Roche Brothers, Springfield.

This company employ 30 hands, and turn out 100 yards dress goods and 30 bed coverings per day.

Whitaker Bros. commenced business in 1868, for the manufacture of carpet warp and twine, in a three story building 50x76 feet; picker house 27x37 feet, 1 story. The water wheel is situated under this building, it is a 36 horse power turbine wheel; they also have a 30 horse power engine built by Benham of Hartford, which furnishes the motive power, flue boiler made by Pitken Bros., Hartford. The engine and boiler house 24x60 feet, 1 story. They employ 30 hands, using 9,000 pounds of cotton per week. They run 2,300 spindles.

Crescent Mills, Chapin & Gould proprietors. (See Springfield.)

Hyannis. This village, composed of about 2,500 inhabitants, is the home of many retired sea captains. It is situated on an arm of the ocean, and contains 3 churches and 1 bank. It is quite a summer resort, 79¼ miles from Boston, on the Cape Cod Railroad.

Hyde Park, 7¼ miles from Boston, on the Boston and Providence Railroad. Many persons doing business in Boston, reside here. The Everett House is a first class hotel.

Hyde Park Woolen Co. was incorporated in 1863; capital $250,000. Dwight Foster, President, C. H. Allen, Secretary and Treasurer, C. B. Snyder agent, R. Bleakie, Superintendent. The mill was built in 1863. It is 250x55, 3 stories with 2 wings 30x35, 3 stories and 120x35, 3 stories respectively, built of brick, with a rear mill 185x40 feet. 2 stories, brick, and numerous buildings attached. This company run 21 sets of woolen machinery, employing 300 persons, consume 3,000 pounds of wool per day, producing 2,400 yards of ladies' cloakings and cassimeres daily. A 250 horse power Corliss engine supplies the power. The mill is located on Meadow Brook, and is lighted with gas made by this company of petroleum. Leland, Allen & Bates, 69 Franklin street, Boston, agents.

C. & A. Spring, occupy one floor of a building 60x35, 3 stories, for the manufacture of sewing machine needles, removing to this place in 1867, from Boston, where they established the business in 1857. They employ 20 persons and produce 250,000 needles per annum.

Tileston & Hollingsworth commenced the manufacture of paper in 1801. They have 3 separate establishments, located at Hyde Park, Milton and Dorcester, and all on the Neponset river. They employ 200 persons, run 24 engines and 6 Fourdrinier machines, manufacturing book and copperplate papers.

Francis Boyd commenced the manufacture of sporting guns in Boston, in May, 1868,—removing here in July. He occupies 1 floor of building 35x60 feet. Employs 10 persons. His machinery consists of 3 engine lathes, 1 upright drill, 1 planer, and 1 milling machine, &c.

The Union Vise Co., manufacturers of vises and standard milling machines, occupy the following buildings, viz.: A factory 120x50 feet; iron foundry, 100x45 feet; malleable iron foundry 40x40 feet, and a blacksmith's shop 30x40 feet. They commenced business in 1865, have 60 employees, and do a business of $75,000 per annum. They have a branch track laid from the Boston & Providence Railroad to their works, a distance of half a mile, and propose extending it through their whole property, which, when completed, will give them over 1½ miles of frontage, thus making one of the finest locations for manufacturing purposes in the country. This company have an office located at No. 61 Water street, Boston.

Indian Orchard, The village is situated 1½ miles from the depot. The population is nearly 500; two churches. It is 92 miles from Boston, 6 from Springfield, 108 from Albany, on the Boston on the Albany Railroad.

Ipswich, a town of 3,500 inhabitants, situated 27 miles from Boston, 81 from Portland and 70½ from Providence, on the Eastern Railroad. Ipswich contains 9 public schools, 1 high school, the others grammar, intermediate and primary, 4 churches, viz.: 3 Congregational and one Methodist. The Episcopal society hold service at Damon's Hall. The Unitarian and Catholic societies at Town Hall. Settled in March, 1632, and incorporated as a town Aug. 5, 1634, covers 25,478 acres of ground, of which 3,579 acres are covered with water.

This town contains personal property to the amount of $474,763 and real estate to the value of $1,071,824, and 821 voters. It also contains 300 dwelling houses, and in 1868 there were in the town 332 horses, 672 cows and 174 sheep. Rate of taxation $1.24 per $100.

N. R. Wait occupies a 2 story wooden building 42x35 feet, located on Market Square, for the manufacture of men's, boy's and youths boots and shoes. Commenced business in 1843, has 20 employees, and turns out 100 pairs of boots per week.

J. A. Johnson, occupies a two story wooden building 42 x20 feet, located on Market Square, for the manufaetnre of ladies' and misses boots and shoes. Have 30 employees and turns out 1,000 pairs per month. Mr. J. commenced the business in 1861, and does a business of $30,000 per annum.

Barrows & Hunt, commenced in 1831 to manufacture worsted, woolen and cotton hosiery, gloves, jackets, &c., occupying a one and a half and two story wooden buildings, located on East street. They employ 25 hands.

Wellington & Perkins. This firm occupy on Cross street, the upper floor of a two story wooden building 48x24 for the manufacture of boots and shoes for men's, boys' and youths'; employ 25 hands and turn out 250 pairs per week, doing a business of $35,000 per annum. They commenced business in 1848.

J. S. Glover occupies a two story wooden building, 30x 50 feet, located on East street, for the manufacture of fancy woolen goods, such as hoods, nubias, head nets, &c. Commenced business in 1843, and has 25 employees. His machinery, consisting of warp looms, is driven by a Roper hot air engine of two horse power. Business capacity $5,000.

S. WILDER & CO.,

MANUFACTURERS OF

COPPER

PUMPS!

CISTERN, WELL, FORCE & AIR CHAMBER PUMPS

On hand, at Wholesale and Retail.

HOLLISTON, MASS.

WILLOW DALE MILL, (C. B. Snyder & Co, proprietors,) is located three miles from Ipswich, in the town of Hamilton, three miles from Newham depot, on the Eastern Railroad, same from Topsfield on the Boston and Maine Railroad. The mill is 100x50 feet, three stories with an ell 50x40 feet, with store house and office building. In this mill are now 3 sets Tainter's cards, 6 jacks and 18 broad looms. Employ 50 hands, and manufacture white all wool blankets, making 600 pairs per week. The machinery is driven by a turbine water wheel, under a fall of 8 feet, made at Lake Village, N. H. The mill is under the supervision of Mr. H. G. Ellsworth.

HODGKINS & BARNARD, manufacturers of nubias and head nets. The mills were started in the year 1862 by Mr. Hodgkins. They occupy 3 buildings, each 2½ stories high, and built of wood. First mill is 80x40 feet; the other buildings are about one-half the size of the first. They employ upwards of 125 hands. They manufacture 1,200 doz. nubias, and 9,000 nets per day.

The office and salesroom are at 41 Summer street, Boston.

IPSWICH MILLS. Manufacturers of cotton and woolen hosiery; a main building, 5 stories high, employ about 210 hands in the mill, and about the same number of females in different parts of this and the neighboring towns are supplied with work at their homes. The patent knitting machines of Mr. John Pepper, also some of English make, turn out annually about 200,000 dozen pairs hose. The machinery is run by water most of the year, but during the dry season a Corliss engine, of 65 horse power, is used. Pay roll, from 6,000 to 7,000 per month.

This company also have a mill at Lake Village, N. H., where they manufacture 120 dozen woolen hose per day, and a machine shop for building the Pepper patent knitting machines.

IRON STONE, situated 40 miles from Boston and 30 from Southbridge, on the Boston, Hartford & Erie Railroad. There is no manufacturing here at present in this village. There was formerly a satinet mill which burned down some time ago. About 200 inhabitants.

JAMAICA PLAIN, 3½ miles from Boston, on the Boston and Providence, Stoughton and Dedham Branch Railroads, in the town of West Roxbury. The residents here are mostly business men of Boston. Six churches and 5,000 inhabitants.

JUNCTION, 1 mile from Pittsfield, and 19 from North Adams, a country station in town of Pittsfield, at the junction of the Boston and Albany and Pittsfield and North Adams Railroad.

KEITHS, 23¾ miles from Boston, 43½ from Newport. A country station on the Old Colony & Newport Railroad.

KINGSTON, 33¼ miles southeast from Boston and 4 miles northwest from Plymouth, on the Plymouth Branch of the Old Colony & Newport Railroad. Has a good harbor, a considerable stream of water and some excellent land. Monks Hill presents a fine view of Plymouth harbor.

KING STREET, about 21 miles from Boston, on the South Shore Railroad; a flag station.

LAKE CROSSING, 16 miles from Boston, and 28 from Worcester. A station on the Boston and Albany Railroad.

LAKEVILLE, 3½ miles from Middleboro', 7 miles from Taunton, a country station situated in a town by the same name on the Old Colony & Newport Railroad and Middleboro' & Taunton Railroad.

LANCASTER, 19 miles from Worcester and 27 from Nashua. A village in a town by the same name on the Worcester and Nashua Railroad. The Indian name of this town is Nasawogg, and is the oldest town in the county, located on both sides of the Nashua river, and has a fine alluvial soil in a high state of cultivation. The village is very beautiful, it is neatly built on a plain, surrounded by hills and watered by a large placid stream.

LAWRENCE contains the stations of North Lawrence and South Lawrence, one mile apart. North Lawrence is 13 miles from Lowell, 26 from Manchester, and 27 from Boston. It is the terminus of the Lowell and Lawrence Railroad, and Manchester and Lawrence Railroad, and is on the Boston and Maine Railroad.

We take the following from J. F. C. Hayes' history of Lawrence for 1868:—

It is now about fifty-three years since the first steam loom was set in motion in America, at Waltham. A bolder step in the interest of humanity had never been taken on this continent, and to Francis C. Lowell, Patrick T. Jackson, and Nathan Appleton the industry of the country is most deeply indebted for that important enterprise. The loom had been constructed by Mr. Lowell from a description of an English machine, then kept a most profound secret from every one except the operative weaver. The dresser was also constructed by Mr. Lowell from drawings obtained in England, and in its first application was an improvement upon the English machine, and with only slight alterations both these machines, or rather machines made after their pattern, are still in use in the mills of this country upon the fabrication of all plain goods.

At the period to which we allude common cotton goods were selling in Boston at about 33 cents per yard. Gradually the prices of common brown sheetings declined as follows: 1816, 30 cents per yard; 1819, 21 cents per yard; 1826, 13 cents per yard; 1829, 8½ cents per yard; 1843, 6¼ cents per yard.

The success of the manufacturing enterprise at Waltham very soon induced other parties, mainly in Rhode Island and Connecticut, to embark in the same channel of trade, and in 1821—seven years after the commencement at Waltham—the parties interested at that place purchased the Pawtucket Canal and commenced operations at Lowell. From this time the progress of manufactures was rapid. It needed neither profound wisdom nor extraordinary foresight to foretell the rising of towns and cities wherever water-power could be made available. The march of enterprise was that of a giant whose foot-prints marked the water-falls and commanded the rushing waters to stand back for the benefit of advancing humanity. Lowell, Nashua, Dover, Great Falls and Manchester sprang into life as by magic. All along the coast the power of our streams, large and small was taken up to propel the spindle and the loom; and where there were no water-falls, the aid of steam, as at Salem, Newburyport and Portsmouth, was called in to supply the deficiency.

Immediately after Lowell was founded, the people along the river, from that city to tide-water at Haverhill, began to predict that the various rapids known as Hunt's, Deer Jump, Peters's, Bodwell's, and Mitchell's Falls would soon be taken for manufacturing purposes. The entire fall in this distance was ascertained to be about fifty feet, of which Hunt's Falls comprised sixteen, Deer Jump, Peter's and Bodwell's comprised twenty-six, and these now afford the power in use at Lawrence. The fall below Lawrence, in two or three rapids, amounts to about eight feet. As early as 1833, Rev. Mr. Perry of Bradford, predicted that the time would come when the Merrimac would be lined with mills from Lowell to Haverhill. About this time the enterprising people of Methuen village conceived the idea of turning the Merrimac into the Spicket, with a view of increasing the power at that village. The survey was made by Stephen Barker, Esq., and resulted in ascertaining that the project was not feasible. In the meantime, Daniel Saunders, Esq., taking hold of the matter in a more practical form, bought out the right to Peter's Falls, thus securing the key to Bodwell's Falls below, and most effectually checkmating any effort on the part of others to use any of the power below Hunt's Falls without his co-operation. This purchase was made in 1837. In 1843, Mr. John Nesmith, of Lowell, desired to know upon what terms Mr. Saunders would admit himself and Mr. Samuel Lawrence to become associate owners with him. The terms were made and accepted. The associates then purchased half of Hunt's Falls, and thus put themselves effectually in a position to control all the power on the river below Lowell. Subsequently, through the influence of Mr. Samuel Lawrence, their interest in Hunt's Falls was transferred to the Middlesex Mills in Lowell, of which Mr. Lawrence was the agent. This association then admitted Messrs. Daniel Saunders, Jr., of this city, and Thomas Hopkinson, of Lowell, and assumed the name of the Water Power Association, with Mr. Lawrence as chairman, Daniel Saunders as land agent, and John Nesmith as treasurer, and agreed to expend fifty thousand dollars in the purchase of land along the river. Mr. Saunders entered upon his duty as land agent, purchasing, conditionally, at about twice their value for farming purposes, about one hundred farms of various sizes. The title to many of these estates belonged to parties at a distance, in Maine, New Hampshire, Vermont and New York. He secured all the desirable property on the north side of the river, excepting that controlled by Mr. Aldolphus Durant, which is still in dispute, and most of that upon the south side of the river, the lot upon which the Shawsheen House is situated, and that just south of the railway bridge, where the brick store of Mr. John B. Howard stands, being the only exceptions. Having thus obtained the title to the land, this company, in 1844, petitioned the legislature for an act of incorporation, and the Essex Company was duly organized on the 16th of April, 1845.

In about two weeks a corps of able assistant engineers were laying out the future city. The labor was of course an arduous and responsible one, requiring the exercise of accurate engineering skill and much prudent forecast in setting at work all the varied branches of trade which the advancement of the great enterprise demanded. The first excavations on this structure were made near the north shore August 1, and the first stone was laid September 19, this being one of the headers of the front course near the centre of the river. This structure is probably one of the strong-

est and most substantial in this or any other country. It is of granite, 1,629 feet in length, 35 feet thick at the base, and 12½ at the top, backed by gravel to within a few feet of the surface. It is built upon, or more properly bedded into the solid metamorphic rock forming the bed of the river, and is in some places 40½ feet high. The overflow of water is 900 feet wide, and the fall is 26 feet. The granite blocks of which the dam is built were hammered on the bed and built and laid in hydraulic cement. The cost of the dam was $250,000. The canal upon the north side of the river is something over a mile in length, 100 feet wide at the upper, and 60 feet wide at the lower end, and 12 feet deep. Including the locks at the lower end the canal cost $200,000. Its course is parallel with the river, from which it is 400 feet distant. The mills are located upon this belt of land thus isolated by the canal.

The Merrimac affords, on an average, at this place, about 5,000 cubic feet of water a second, but the amount sometimes reaches 60,000. The power thus obtained is estimated at 150 mill power. A mill power is calculated to absorb 30 cubic feet of water a second, with a head and fall of 25 feet. This gives a force which is estimated to equal from 60 to 70 horse power—a horse power being defined by Watt at 32,000 pounds avoirdupois lifted to the height of one foot in a minute.

The lessons yearly impressing themselves upon the mind by the reserve of the power at Newfound, Squam and Winnipisawke lakes may sometimes be so convincing that the mill owners upon the Merrimac and its tributaries will be induced to avail themselves of the vast power now annually running to waste, by the erection of dams upon the more insignificant sources of supply, and from which all our floods are derived. The river drains a vast extent of country, the lake surface alone being equal to about 350 square miles, something like half of which is already held in reserve for dry weather, by adequate dams. The smaller lakes are the most important reservoirs, as their banks are more abrupt than the larger, and be raised much higher at trifling cost in comparison to the quantity of power reserved. These are yet to be secured, and when this done in a proper manner, the supply of water will be rendered not only continuous, but will flow in vastly increased volume and power. Every additional dam upon the main river or any of its tributaries, however small, will prove an aid in this direction. That the time will come when the minimum of water will be increased at Lawrence to 8,000 if not 10,000 cubic ft. per second, and the maximum be reduced to 30,000 or at most 40,000 ft. a second, there is as little room to doubt as there is that eventually every available power upon these streams will be harnessed to the car of manufacturing industry. The power of the Merrimac and it tributaries is not at the present time taxed with one-third the labor it is capable of performing. The Essex Company dispose of the water power to manufacturers upon such terms as are deemed prudent between the parties. At the outset, as for instance, when the Atlantic Mills Corporation made their purchase, the price agreed upon for a mill power was $14,333, of which sum $9,333 was paid in cash, the balance of $5,000 remaining perpetually at 6 per cent. interest, payable annually in silver or its equivalent.

The Atlantic Company bought twenty mill powers, and consequently pay an annual rent of $6,000. We are not aware that any variation from this price has been made by the Essex Company, until recently the price per mill power has been somewhat increased.

"Each mill power is declared to be the right to draw from the nearest canal or water course of the grantors so much water as shall give a power equal to thirty cubic feet of water per second, when the head and fall is twenty-five feet; and no more is to be drawn in any one second, nor is the same to be drawn more than sixteen hours in each day of twenty-four hours, and in order to prevent disputes as to the power of each mill privilege in the variations of the height of water from changes of the season or other causes, it is understood and declared that the quantity of water shall be varied, in proportion to the variation of the height, one foot being allowed and deducted from the height of the actual head and fall, and also from that with which it is compared before computing the proportion between them: thus, on a head and fall of 30 feet the quantity of water to be used would be twenty-four cubic feet and 24-29ths of a cubic foot per second."

Something like three-quarters of the power originally owned by the Essex Company has thus far been disposed of to the various corporations and individual enterprises already in operation or in the course of construction. The future will increase this power considerably; but the present generation need borrow largely on the hope of such a consummation during their time.

At the time the Essex Company commenced operations here, the entire population of the territory now comprised within the limits of Lawrence was probably not over 200. But population rapidly followed enterprise.

The legislature of 1846 granted charters for the Bay State Mills, the Atlantic Cotton Mills, the Union Mills and the Bleaching and Dyeing Co., with an aggregate capital of $1,500,000. This was certainly a most formidable display of corporations and capital; but the Union Mills and the Bleachery were never built, and even the Atlantic Cotton Mills subsequently concluded to expend a million and a half instead of two millions of dollars, and the central mill site next west of what is now the Washinton Mills, reverted to the Essex Company. This most desirable property has since gone into the hands of the Pacific Mills Corporation, and their beautiful worsted mill stands upon a portion of it.

The Washington Mills were laid out on the 11th of April, 1846, and on the 9th of June following work was commenced on the Atlantic Cotton Mills. On the 25th of June the frame of the Essex Company's saw mill was raised. On the 10th of July following work was begun on the Essex Company's foundry. On the 12th of August the first brick block in the city was commenced. This block is now known as boarding house No. 1, on the Atlantic Corporation. It was finished and occupied on the 4th of January, 1847. The race-way to the Essex Company's machine shop (now the Everett Mills) was commenced November 13th.

On the 7th of September, 1846, a post-office was opened in a little building on the Turnpike, formerly a shoe shop. It was about 15x15, and one story high. The coming of this important adjunct of a busy community took many by surprise. The idea of establishing a post-office here originated with Mr. George A. Waldo, of Methuen, whose son, George Albert Waldo, was made the postmaster. The business at the seat of government was performed by the personal efforts of Mr. Samuel J. Varney, of Lowell, and at his suggestion the office took the name of Merrimac. Previous to this event, from the commencement of operations here, the place was known by numerous names, such as "New City," "Essex," "Andover Bridge," &c. The name thus given officially to the place was continued until the town of Lawrence was set off from Methuen and Andover by legislative enactment in the winter of 1847. This separation was opposed by residents and authorities of both Andover and Methuen; not, perhaps, with the idea that it could be long postponed, but more upon the plea that it was then altogether unnecessary and premature. Immediately after the project of severing the "new city" from the territory of Andover and Methuen was proposed, letter writers in distant papers began to suggest that the town should take the name of Lawrence, "as a compliment to

Hon. Abbott Lawrence, who had done so much for Massachusetts, and this place in particular."

On the 13th of January, 1847, a meeting of a considerable number of residents took place at the office of the Essex Company, with a view to an understanding in regard to the name of the new town, to be embodied in a petition to the legislature for a charter. At the suggestion of Mr. Storrow, the name of Lawrence was agreed upon, not, as the newspaper writers had proposed, as a compliment distinctively to Mr. Abbott Lawrence, but as a token of respect to a family among the most liberal and distinguished in the country. There were then living three members of this family, Amos, Abbott and Samuel. Of these, Abbott and Samuel were among the most energetic business men of New England, and both more actively engaged in the enterprises here than any others not residents among us. In point of investment, the family undoubtedly then had as great an interest in the new town as, we might almost say, all the others combined. There was therefore a good if not a sufficient reason why the future city should be christened as it was. That some among us would have preferred that the new town should retain the name applied to it by the post-office department, there is no reason to doubt, but most of these being in favor of a town organization, very readily acquiesced in the change rather than hazard the chances of obtaining a charter by creating a division in regard to a name. For that time they cheerfully admitted that "there is nothing in a name."

That it was not the intention to distinguish one over another member of the Lawrence family in the name of the city, we may refer to the distinct impression: "S. Lawrence, A. Lawrence," upon a brick in the south-east corner of our City Hall. We leave the reader to define the question whether Amos or Abbott, or both, were intended to be complimented in the impression, "A. Lawrence." There is no question that Samuel, who was then agent of the Bay State Corporation, as well as of the Middlesex Mills in Lowell, was included in the compliment.

In 1848 there were less than 100 persons in the town paying a tax of $10. Of these, 16 paid over $20 and less than $30, 8 paid from $30 to $50, 4 paid from $50 to $100; T. J. Coburn, now of Lowell, paid $127.50; Abial Stevens, $160, and Charles S. Storrow $165.25. The Essex Company paid $4,950.96, the Bay State, now Washington Mills, $3,028.20, the Atlantic Mills $2,100. Fifteen persons owning property here, but then residing in other towns, and taxed $10 or more as non-residents, subsequently became residents of Lawrence. Thirty-seven of the resident tax payers of the class named are known to have since left the town to reside elsewhere, while twenty-one have died, and eight of the non-resident tax payers who subsequently became residents of the town have since either died or changed their residence. We speak, of course, only of those whose names and faces were familiar. Many more, with whom we had no acquaintance, may have gone in one or the other of these avenues of exit without our knowledge.

The Boston and Maine Railway, having changed its location from Andover to North Andover, constructed, between April, 1845, and March, 1848, the five miles of road between those places by way of this city, together with the bridges across the rivers and canal, and on the 28th of February, run their passenger cars across the bridge for the first time to the station on the North side of the river.

On the 2d of July, 1848, the Lowell railway being completed, five trains were run between Lawrence and Lowell, conveying passengers free. Over 8,000 people were carried over the road during the day. It seemed as though all Lawrence was going to Lowell, and all Lowell coming to Lawrence.

The Essex railway, from Lawrence to Salem, was opened for travel on the 4th of September, 1848. It brought through a load of the most quiet and orderly "solid men" of Salem, which contrasted very favorably with the multitude of turbulent men and boys who patronized the free ride from Lowell to which we have alluded.

The Manchester and Lawrence railway was opened for travel in October, 1849. An incident in connection with this line is worthy of note. The company having been duly chartered and organized, opened its books for subscriptions. In two days more stock was subscribed for than was required to build and equip the line. And yet the books were kept open until, in the space of thirty days, nearly three millions of dollars had been subscribed! Then commenced a scramble for the stock, and a quarrel among subscribers and officers, which continued for a considerable time, but the matter was finally compromised. Since its construction, this line has been almost constantly "in hot water," from one cause or another. Quarrels among directors, war upon conductors, and difficulties with connecting lines, have marred its existence almost continually.

The city charter was passed March 21, 1853, and was accepted by the people on the 29th of the same month, by 659 yeas to 143 nays. The first election under the charter was held on the 18th of April following, and the city government was duly organized on the 18th of May.

The schools of Lawrence are the just pride of the people. They are divided into primary, middle, grammar and high schools. The high school building is one of the most beautiful structures in the State. It is located on the north side of the common, near the Oliver school house. There are two grammar schools, one on the south and one on the north side of the river. The primary and middle schools are located in such parts of the city as best accommodate the greatest number of pupils.

Lawrence is probably better supplied with useful and entertaining libraries than any city of its population in New England. There are in the city no less than seven distinct collections, embracing in the aggregate about 20,000 volumes. Nearly 8,000 volumes are contained in the libraries of the Atlantic and Pacific Mills, the circulation of which is confined to persons employed on these two corporations. Probably the most elaborate arrangement for the dissemination of knowledge among the working people to be found on any manufacturing corporation in the world, is at the Pacific Mills in this city. It is not with books alone that the Pacific operatives are supplied. They have also access to a reading room, where an ample supply of papers and periodicals are neatly arranged and constantly accessible to all whose duties will permit them to avail themselves of their perusal. The Franklin Library, at which Mr. Abbot Lawrence so liberally and so wisely contributed, contains 3,800 volumes. John C. Dow's library contains about 2,800, Lewis Stratton's about 800, and I. A. Whitcomb's about 700 volumes. There is also a Farmers' library, of about 500 volumes.

The growth of Lawrence is pretty well indicated by the increase in the consumption of gas during the past ten years. The amount disposed of in 1857 equalled only about 7,500,000 feet per annum. The present supply is equal to 32,000,000 feet. Every mill in the city, and most of the large workshops, are lighted by gas. All the mills and most of the shops are warmed by steam.

Lawrence contains 17 churches, viz.: 4 Congregational, 4 Episcopal, 3 Baptist, 1 Church of the Immaculate Conception, 1 Unitarian, 1 Universalist, 1 Advent Chapel and 2 Catholic. There are 2 savings and 2 national banks, as follows: Lawrence Savings Bank, Essex Savings Bank, National Pemberton Bank and Bay State National Bank.

SLADDIN & LORD,

MANUFACTURERS OF

Patent Self-Acting Loom Harness

KNITTING MACHINES.

ALSO, MANUFACTURERS OF

LOOM HARNESS.

ONE OF THESE MACHINES IS EQUAL TO TEN HAND KNITTERS.

Orders executed at the shortest notice. State, City and Town Rights for sale.

PAGE'S BUILDING, METHUEN STREET,

LAWRENCE, MASS.

MANUFACTURERS.

PACIFIC MILLS. Capital, $250,000; located on Canal street, for the manufacture of calicoes, shirtings, lawns, delaines, alpaccas, coburgs, and other worsted dress goods. Machinery consists of 136,604 spindles and 3,523 looms, and employ 1,200 males and 2,400 females; J. Wiley Edwards, treasurer.

ATLANTIC COTTON MILLS; incorporated February, 1846; capital, $1,500,000; located on Canal street, for the manufacture of sheetings and shirtings. They employ 350 males and 850 females. Their machinery consists of 56,000 spindles and 1,538 looms, consume 110,000 lbs. of cotton, turn out 320,000 yards of cloth per week.

THOMAS CLEGG occupies 2 rooms of a 4 story wooden building, 60x45 feet, for the manufacture of reeds and loom harnesses, located on Canal street. Commenced business in 1844, employs 20 hands, consumes 150 lbs. worsted yarn per month, 30 lbs. of wire, and turns out 3 sets of harnesses per day, and has capacity for turning out 50 reeds per day, and does business to the amount of $21,000 per annum.

THE LAWRENCE WORSTED CO. manufacture worsted yarns and braids, located on Canal street; occupy buildings as follows, viz:—wooden building, 100x50 feet, 3½ stories, for factory; wooden building, 16x40 feet, for repair shop, and other small buildings for storage. Commenced business in January, 1864; give employment to 100 hands. Their machinery is driven by 1 turbine water-wheel, 60 horse power, and a steam engine of 20 horse power, built by J. C. Hoadley & Co., of Lawrence, Mass., with 1 tubular boiler, 15 feet long, built by the Lowell Machine Shop. They consume from 16 to 20,000 lbs. of wool, and turn out 10,000 lbs. of yarn and braids per month.

SLADDIN & LORD, manufacturers of the patent self-acting loom harness and knitting machines. Commenced business in January, 1868; occupy 1 floor of a 3 story wooden building 48x48 feet, located on Northern street, where they employ 7 hands. State, city and town rights of the patent self-acting loom harness for sale.

RICHARD HALL & Co. occupy a 3 story wooden building 35 x35 feet, for the manufacture of spindles, fliers, tubes, whirls and caps, located on Canal street. Commenced business in 1863; employs 15 hands. Their machinery is driven by a portable steam engine, built by J. C. Hoadley & Co., of Lawrence. They consume 1,000 lbs. of steel, and 500 lbs. of iron per month; do a business of $10,000 per annum.

THE WRIGHT MANUFACTURING CO. occupy a three story wooden building 35x75 feet, located on Canal street, for the manufacture of worsted braids. Commenced business in 1865; employ 40 hands; machinery, consisting of 275 braiding machines, is driven by 2 Whitney water wheels—one 30 inch, the other 18 inch.

They consume 6,500 lbs. of worsted yarn, and turn out 2,500 gross of Alpacca braid, and 12,000 dozen of brown Alpacca braids per month; do business amounting to $175,000 per annum.

J. C. HOADLEY & Co. occupy 2 floors of 3 story wooden building 100x45 feet; boiler shop 90 x 40 feet; forge shop 50x60 feet, with store sheds, and other small buildings, located on Canal street, for the manufacture of portable steam engine boilers, &c. Commenced business in 1857; employ 60 hands. Their machinery, consisting of engine lathes, planers and other machinery, is driven by 1 water wheel; have one boiler, built by themselves. They turn out 3 portable steam engines per week, and do a business amounting to $200,000 per annum.

JOHN H. STAFFORD,

Manufacturer and Wholesale Dealer in

BRUSHES!

287 ESSEX STREET, LAWRENCE, MASS.

Particular attention paid to all kinds of Machine and Factory Brushes, orders by mail solicited and promptly attended to.

JOHN H. STAFFORD occupies a building, 16x50 feet, with store in front, located at 287 Essex street, for the manufacture of and wholesale dealing in all kinds of brushes. Commenced business in July, 1867, employs 16 hands, turns out 12 dozen brushes per day, and does business amounting to $8,000 per annum.

BAKER, JOSELYN & Co., occupy a wooden building 38x40 feet with an ell 10x30 feet, pattern house 30x18 feet located on Allen street, for the manufacture of iron castings and brackets. Commenced business in 1866 and employs 8 hands. Their machinery is driven by a steam engine 5 horse power built by R. W. Pratt & Co. of Boston, with 1 upright boiler. They consume 10 tons of iron, per month, and turn out 400 sets of brackets per day, and do business amounting to $18,000.

LEONARD & RYMES occupies 1 floor of a 3 story wooden building 40x25 feet, for the manufacture of machinery, located on Canal street. Commenced business in 1868 and employs 4 hands. His machinery, consisting of engine lathes, planers, drilling lathes, &c., is driven by water power.

SAMUEL ROBINSON & Co. occupy a two story brick building 125x40 feet; wool room 2½ stories 26x40 feet, for the manufacture of worsted yarns of all kinds, located on Allen and Gardner streets. Commenced business in 1862 and employs 62 hands. Their machinery is driven by one Leffel water wheel, 85 horse power. They have 1 tubular boiler, 30 horse power built by J. C. Hoadley & Co. of Lawrence. They consume 4,000 pounds of wool and turn out from 2,000 to 3,000 pounds of worsted yarns per week; do business amounting to $200,000 per annum.

J. A. BACON occupies a 2 story brick building 100x50 feet, with stock houses 1 story 50x30 feet, another 2 stories 50x30 feet, located on Marston street, for the manufacture of paper books and newspapers. Commenced business in 1861 and employs 60 hands. His machinery is driven by 2 24 inch Tyler water wheels. He consumes 90 tons of stock per year and turns out 2½ tons of paper per day.

BARKER & Co. occupy a wooden building, 50x30 feet, located on Marston street, for the manufacture of brass work of all kinds, commenced business in 1867, employ 2 hands, consume 200 lbs. of brass per month, and do business of $2,000 per annum.

WARREN & ROBINSON, manufacturers of card clothing, occupy 2 floors in a 4 story wooden building, 30x60 feet, located at No. 13 Broadway, where they employ 10 hands, commenced business in 1850. Machinery consists of 30 card setting machines, which are driven by an engine of 30 horse power in a building adjacent; consume 500 sides of leather and 1 ton of wire, producing 2,500 feet of card clothing per month; do a business amounting to $50,000 per annum.

WILLIAMS & WILSON commenced business in 1864, and occupy 2 floors in a 4 story building, 30x60 feet, at No. 13 Broadway, for the manufacture of machinery. They employ 10 hands. Their machinery consists of lathes, planers, boring and milling machines, and are driven by an engine 30 horse power in a building adjacent.

DAVIS & TAYLOR occupy a 3 story brick building, 100x50 feet, with an L, 60x30 feet, located on Broadway, for the manufacture of flour; commenced business in 1857, and employ 17 hands. Machinery is driven by 2 Leffel water wheels, with 5 run of stone. Have a capacity of grinding 1,000 bushels of corn, and turning out 300 bbls of flour per day. Do business amounting to $1,000,000 per annum.

LAWRENCE LUMBER Co. occupy wooden buildings and yard on Lowell street, for the manufacture of wooden boxes.

E. DAVIS & SON occupy a brick mill 76x100 feet; carpenter shop and ware house 30 x 60 feet; pattern house 30 x 50 feet; store house 20x30 feet, located on Canal street, for the manufacture of iron castings, machinery and Railroad work. The business was established in North Andover in 1842, moved to Lawrence in 1863. Employ 40 hands. Their machinery is driven by one 36 inch Tyler water wheel; consume 800 tons of iron. Do business amounting to $100,000 per year.

THE ESSEX BREWERY occupy a 2 story wooden building 40x100 feet, located on Oxford street, for the manufacture of ale and porter. The business was established in 1867, and they now employ 12 to 18 hands. Their machinery is driven by a steam engine of 6 horse power, built by J. C. Hoadley, of Lawrence, Mass., with 1 boiler 30 horse power for heating buildings, &c. This firm consume about 1,500 lbs. of malt per week, and have a capacity for turning out 1,000 barrels of ale and porter per week; and do a business of $50,000 per annum.

L. SPRAGUE & Co. occupy a wooden building 2 stories, 100x30 feet, located at 261 Lowell street, for the manufacture of bobbins and spools. Commenced business in 1864; employ 55 hands. Machinery is driven by an engine of 65 horse power in building adjacent; turn out 200,000 bobbins and spools, and consume 40,000 feet of birch and maple wood per month, and do business amounting to $75,000 per annum.

MCKAY SEWING MACHINE ASSOCIATION occupy a 3 story brick building 200x40 feet, with an L 1 story 200x40 feet, located on Haverhill street, for the manufacture of the McKay sewing machine and nailing and trimming machines. Commenced business in March, 1865; employ 60 hands. Machinery consists of lathes, planers, milling machines, upright drills, &c., driven by an engine of 25 horse power, built by J. C. Hoadley & Co., of Lawrence, with 1 tubular boiler. They consume 2,000 lbs. of steel and 5,000 lbs. of cast iron and 22,159 lbs. of coal per month, and turn out from 75 to 100 machines, besides making all parts of the machine to order.

L. BEACH & SON occupy a 2 story wooden building 55x70 feet; store house 50x30 feet; another store house 25x50 feet, with land 140x300 feet, located on Maple street, for the manufacture of hard and soft soap. Commenced business in 1847; employ 12 hands. Their machinery is driven by a steam engine 12 horse power, built by Salem Machine Co., of Salem, with 1 tubular boiler 50 horse power, built by Kendall & Roberts, of Cambridgeport. Consume 15,000 lbs. of tallow, and turn out 16,000 lbs. of family, 12,000 lbs. of scouring, and 200 bbls. of soft soap per month.

GEORGE LAMB,

Manufacturer of the celebrated

AMERICAN FILE,

Marked F. BUTLER.

Near the Railroad Depot, - - - - *LAWRENCE, MASS.*

All kinds of old files and rasps re-cut, and all kinds of new files made to order at short notice. New and re-cut files on hand at the lowest market prices and warranted to give satisfaction.

GEORGE LAMB, manufacturer of the celebrated American file, occupies a two story woodeu building, 50x40 feet, grinding shop 20x20 feet, forge shop 20x30 feet, office 16x18 ft., located on Essex street, near the railroad depot; commenced business in 1863; employs 33 hands. Receives power from an engine 60 horse power in building adjacent; turns out 400 doz. files per month, and consumes from six to seven tons of steel per year, and does business amounting to $12,000 per annum.

E. E. FOSTER, occupies 1 floor of 3 story wooden building 35x78 feet, located on corner Methuen and Franklin streets, for the manufacture of leather belting and covers of top rollers, commenced business in 1865, employs 10 hands, machinery is driven by a engine of 15 horse power. Corliss patent, built by Harris of Providence, R. I., with 1 tubular boiler built in South Newmarket, N. H., consume $1,000 worth of leather per month, and do business amounting to $30,000 per annum.

EVERETT MILLS, located on Union foot of Essex street, manufacture cotton and fancy cassimeres, tickings, stripes, sheetings, ginghams, drills, denims, poplins, cotton flannel and worsted yarns, was incorporated in 1860, give employment to 280 males and 683 females. Capital $800,000; machinery consists of 30,830 spindles and 700 looms. They consume 30,000 lbs. of cotton, 4,000 lbs. of wool and turn out 98,000 yards of cloth and 2,500 lbs. of worsted yarn per week.

PEMBERTON MILLS, incorporated in 1860, located on Canal street, for the manufacture of cotton and woolen goods in variety; machinery consists of 28,000 cotton spindles, 14 sets of wool cards and 633 looms. Employ 200 males and 650 females.

WASHINGTON MILLS, 3 woolen mills, dye house and 1 cotton mill, located on Canal street; capital $1,650,000; manufacture broadcloth, cassimeres, doeskins, sackings, opera flannels, Italian cloth, worsted goods, shawls, print cloth and cambrics. Their machinery consists of 110 sets of woolen cards, 2 sets of worsted machinery, 41,560 woolen spindles, 865 woolen looms, 20,000 cotton spindles and 400 cotton looms. They employ 1,000 males and 1,400 females, consume 50,000 lbs. of clean wool per week.

LAWRENCE WOOLEN CO., organized in 1864; capital, $150,000. Geo. P. Upham, treasurer.

T. S. STRATTON & CO. occupy a 3 story wooden building, 36x50 feet, located on Essex street, for the manufacture of wool hats. Commenced business in 1864, employ 50 hands, run a steam engine, 40 horse power, built by J. C. Hoadley & Co., of Lawrence, with 1 tubular boiler, built by Dobins & Crawford, of Lowell, Mass., turn out 50 dozen hats, and consume 300 lbs of wool per day, and do a business amounting to $15,000 per annum.

C. K. & J. P. PILLSBURY, successors to Webster, Dustin & Co., occupy a floor of a 4 story building, 35x75 feet, with store house, 30x20 feet, located on Methuen, corner of Franklin street, for the manufacture of cotton and woolen machinery. Commenced business in 1868, employ 20 hands, receive power from an engine of 20 horse power in a building adjacent, and do business to the amount of $75,000.

FAVOR BROS., manufacturers of door sashes and blinds, commenced business in 1864, occupy a 3 story wooden building, 35x60 feet, also a steam mill, 2 stories, 60x250 feet, located on Lowell street; office on Essex street, near depot. Employ 30 hands; do business amounting to $100,000 per year.

S. Q. HERSEY, manufacturer ladies', misses' and children's boots and shoes. Commenced business in 1866; occupies 1 floor of a four story brick building 50 x 100 feet located on Broadway, where he employs 40 hands; does business amounting to $70,000 per annum.

E. YEATON & CO., manufacturers of power loom harnesses and reeds. Commenced business in 1865; occupy 1 floor of a 4 story brick building 50x100 feet, located on Broadway, where they employ 50 hands. They turn out 400 sets of loom harnesses per month, and do business amounting to $12,000 per year.

MERRIMAC MACHINE SHOP, A. Blood, proprietor, occupies a 2 story wooden building 40x80 feet, with an L 20x80 ft.; pattern house, 2 stories, 100x35 feet; boiler shop 30x100 ft., office 15 x 30 feet, located near Merrimac Iron Foundry, on Medford street, for the manufacture of shaftings, pulleys and other machinery. Commenced business in December, 1853, employ from 15 to 20 hands; machinery is driven by a steam engine 40 horse power, with 1 tubular boiler—boiler built by himself—does business amounting to $40,000 per annum.

EDWARD PAGE occupies 2 floors in a 4 story brick building 40x100 feet, also a wooden building 3 stories 35x40 feet, located on Broadway, for the manufacture of oak tanned leather belting. Commenced business in 1848 and employs 10 hands. His machinery is driven by a steam engine of 20 horse power built by the Swamscot Machine Co. of South Newmarket, N. H., with 1 tubular boiler 16 feet long built by J. C. Hoadley & Co., of Lawrence, Mass.

J. CLARK occupies 1 floor of a 2 story building 35x35 feet, at 22 Newbury street, for the manufacture of hoop skirts and corsets. Commenced business in 1857 and employs 2 hands; turns out 50 skirts per month and does business of $3,000 per year.

Pacific Brewery, T. H. Doliver, occupies a 5 story brick building 22x75 feet, store house 40x50 feet, boiler house 12 x30 feet, located on Water street, for the manufacture of ale and porter. Commenced business in 1868 and employs 6 hands. His machinery is driven by a portable steam engine of 20 horse power built by the Swamscot Machine Co. of South Newmarket, N. H. Consumes 1,000 bushels of malt and turns out 320 barrels of ale and porter per month and does business amounting to $50,000 per annum.

Merrimac Iron Foundry, Bennett & Joselyn proprietors, manufacturers of iron castings, located on Essex street, where they occupy buildings as follows: wooden building 40x120 feet, pattern house 30x60 feet, ware rooms 65x65 feet and carpenter shop 20x30 feet. They commenced business in 1853, employ 30 hands and consume 60 tons of iron per month.

J. Heaven, manufacturer of worsted, mohair, and alpaca braids, occupies 1 room in a 3 story wooden building, 32x50 feet, located on Canal street, commenced business in 1865. Employs 12 hands; machinery consists of 73 braiding machines, which are driven by water wheels in building adjacent. He consumes from 20,000 to 22,000 lbs. of yarn, and turns out 4,400 doz. pieces of braid per month, and does business amounting to $40,000 per annum.

Wm. M'Allister occupies a 3 story wooden building, 75x 35 feet, also a wood building, 2 stories, 35x50 feet, located on Marston street, for the manufacture of woolen, flax, and printing yarn. Commenced business in 1862; employs 8 hands. The machinery is driven by one 24 inch turbine water wheel.

The Lawrence Flier and Spindle Works occupy 1 floor of a 3 story wooden building, 100x45 feet, with blacksmith's shop, 40x30 feet, located on Canal street, for the manufacture of Pearl's patent fliers, spindles, &c. Commenced business in 1861; employ 40 hands. Their machinery is driven by a turbine water wheel, 30 horse power, and the building is heated by 1 steam boiler, Clogsden patent, of Boston, Mass. Do business amounting to $40,000 per annum.

Arlington Woolen Mills. Incorporated in 1865; capital, $240,000; manufacture ladies' worsted and cotton dress goods, located on Broadway.

Wm. B. Hayden & Co. occupy a wooden building two stories, 150x100 feet, located on the Spiket river, for the manufacture of leather board. Commenced business in 1862; employ 25 hands. Machinery is driven by a steam engine 35 horse power, built by Roots, of New York City, with one tubular boiler, built by Dobbins, of Lowell, Mass. Also, run four water wheels, built by J. W. Upham, of Worcester, Mass.

Less than half a century ago the work of "setting" cards for card-clothing was done exclusively by hand. While the older females members of many a country family were employed in weaving printing cloths, the younger members, boys and girls, earned an honest penny by "setting" cards. What they did—a slow and painful work to the nimblest fingers, a little compact machine hardly bigger than a Wheeler & Wilson's, now accomplishes with accuracy more than human and rapidity for which there is no posible simile. The card setting machine has often been spoken of as one of the most remarkable mechanical marvels of the age, and its office and mode of operation must be familiar to our readers.

This machine may be seen in operation at the card-clothing factory of George A. Fuller. This establishment was founded about twelve years ago, and under the management of Stedman & Fuller has acquired for its products an enviable celebrity. Mr. Fuller is now sole proprietor of the factory, which comprises two buildings—one 150x36 feet and 4 stories, and one 70x36 feet and 2 stories. It is conveniently arranged, well lighted, heated by steam, and its machinery is driven by water power. There are in operation 92 machines, and the working force is 16 hands. The card machines in use are of various kinds and embody the latest improvements.

Mr. Fuller manufactures clothing of all kinds for all kinds of machinery—including doffer rings, cotton and wool nappers, &c., &c. The English stripper has been made by him for many years. About nine months ago Mr. Fuller began the manufacture of what are called Belgian felt cards for woolen machinery, his agents are Enos Brown & Co., Chicago, A. C. Brown, of Cincinnati, and J. William Jones & Co., of Philadelphia.

E. E. Foster, manufacturer of belting. He also carries on in connection with this, the roll covering business. Has a branch shop at Salem, Mass., and employs 10 hands, consumed during past year 6,492 sheep skins and 360 calf skins. Does business averaging about $33,000 per annum. Selling agent at Salem, Levi W. Derby.

Lawrence, Duck, Co., incorporated in 1853, for the manufacture of cotton sail duck and twine. The mill building, built of brick, is 140x65 feet, 5 stories high, contains 5,800 spindles, (consuming spindles, including twisters,) picker house, cotton house of brick and repair shop of wood. Employ about 250 hands. This mill consumes about 1,100,000 lbs. cotton per annum. The productions are sold by Feering, Rodman & Swift, Boston; Isaac Thacher, Treasurer, Boston.

Lee, 99 miles from Bridgeport, 158 from New York, and 162 from Boston, a village and town on the Housatonic Railroad and river, in Berkshire county. The village has 8 churches, 1 bank and an estimated population of 5,000.

Columbia Mill, situated ½ mile North of Lee Centre, and is the largest of their mills, employing 150 hands, and turning out 8,000 lbs. paper per day. Motive power derived from 5 turbine wheels of 275 horse power combined. They manufacture printing paper at this mill.

Eagle Mill, situated ½ mile North of the centre of the village. They manufacture manilla paper, employing 15 hands, turning out 2,000 lbs. per day. The machinery is driven by 2 Parker wheels of 75 horse power.

Union Mill, where they manufacture writing paper. This mill is situated in the centre of the village, a few rods above the depot, where they employ 75 hands, turning out 2,000 lbs. paper per day. Power used at this mill is one of Lefel's turbine wheel of 75 horse power.

The Housatonic Mill, situated ⅛ mile below depot, for the manufacture of book paper; is driven by 7 turbine wheels of 175 horse power combined. Employs 125 hands, turning out 6,000 lbs. paper per day. This company use about 400,000 tons stock per month, in supplying their mills.

Wm. T. Fish commenced the manufacture of paper boxes in 1868. His building is 100x25 feet 3 stories, employing 35 hands using about 250 pounds of board paper and 3 reams of glazed paper in making 3,000 boxes on an average days' production. Motive power derived from a 12 horse power engine with tubular boiler.

Smith Paper Co. Incorporated in 1866 with a capital of $220,000. The officers of the company are E. Smith President; DeWitt S. Smith, Secretary, and Wellingt Smith, Treasurer. The business was established 40 y ago by Platner & Smith. This company run 5 mills f manufacture of paper of different kinds. The firs

"Pleasant Valley Mill," half a mile above Lenox furnace in the town of Lee, for the manufacture of book paper. The buildings cover 100x50 feet principally 2 stories, employ 100 hands and turn out about 5,000 pounds of paper per day. Motive power consists of 4 turbine wheels of 175 horse power combined.

W. H. Balauvelt & Co., manufacturers of Manilla paper and paper twine. Business established March 15, 1864. Paper mill buildings consist of a main building, 75x39 feet, 2 stories; bleach wing, 29x38 feet, 2 stories, and machine shop 80x20 feet, 1 story. They employ 7 men, produce 6,000 pounds paper per day, and do a business of about $60,000 per annum. Run one 62 inch machine and two cylinders, made by Severns Lawrence Machine Co., Lawrence, Mass. Two Lefell's iron wheels of 60 horse power capacity under 38 feet fall, supplies the power. The twine mill now in connection with the paper mill, is a two story building, 30x40 feet. In it are employed 18 boys and girls from 12 years of age and upwards. Run 350 spindles and preparation, and produce 1,000 lbs. twine per day. The power is supplied by a ten horse power portable steam engine, and a Lefell's iron water wheel, under 8 feet fall.

J. & R. J. Dowd, manufacturers of paper mill engine roll bars, bed plates, trimming knives, and pattern knives, of every description. Commenced business in East Lee, 2 miles from the depot at Lee, in 1858, occupy forge shop, 30x50, containing two trip hammers of 125 lbs. each, driven by a water wheel of 10 horse power; finishing shop, 24x60 feet, containing three grindstones, drill polishing wheels, &c.; driven by a 25 horse power wheel. This firm consume about 35 tons iron and 8 tons steel yearly, and do a business of about $20,000 per year.

Leeds, 3 miles from Williamsburg, and 4½ from Northampton, a village of about 800 inhabitants, situated on the Williamsburg Branch of the New Haven and Northampton Railroad, has a large unused water power and excellent railroad facilities. The manufacturing business of the place consists of A. P. Critchlow's extensive vegetable ivory button manufactory, a branch of the Nonotuck silk company's manufactory of sewing silk and twist, with a large lumber and flouring mill belonging to same company, all under the superintendence of L. Dinrack, Esq., and the manufactory of the Northampton Emery Wheel Company, the last named company has been established only about one year, but the merits of their goods are bringing them into general use, the business is increasing rapidly and is evidently destined to grow into a large and successful business. In addition to solid emery wheels, this company manufacture artificial oil stones, much superior in cutting qualities to the best natural stones, and for finishing down iron work, sharpening planer, knives and mower and reaper cutters are unequalled. One of them will out wear for such purposes a dozen good files and retain the cutting qualities to the last.

A. P. Critchlow, manufacturer of vegetable ivory buttons. The business was established in 1859, by Mr. Critchlow. The size of factory buildings is as follows: The main building is 45x80 feet, three stories and basement, built of wood. A wooden, two story building, about 30 feet square, is used for packing. Near the packing-house is a nice building used as an office. The employees number from 125 to 150, who produce about 3,000 dozens per week of the various kinds of buttons. The motive power is derived from two turbine water wheels. There is also one tubular boiler. Post office address, Leeds.

Lenox, 102 miles from Bridgeport and 8 from Pittsfield; a village and town in Berkshire county on the Housatonic Railroad. The village contains the Court House and County Jail of the county, and has 3 churches and an estimated population of 500. Quite a number of families from New York spend the summer here.

Lenox Furnace, 160 miles from New York, 58 from Albany and 160 from Boston. A village of about 200 inhabitants in the town of Lenox.

The Lenox Plate Glass Co., incorporated 1866, with a capital of $130,000; R. G. Averill, president; A. T. Servin, treasurer. This company manufactures rough plate and polished glass, being the only company in this country who make polished glass. Their main building is 500x100 feet, one story, this building is for the manufacture of glass, which is made from sand from their own bed near their works, using gas for heating. Their polishing shop is 140 x100 feet, three stories; employ 60 hands and turn out about 1,500 tons glass per year.

Lenox Furnace. Confings, Church and Taylor, commenced business in 1866 for the manufacture of iron. The business was established 104 years ago by the Lenox Furnace Co. The height of stack is 30 feet, and employ 130 hands, turning out 300,000 tons of iron per year. This company use the Salisbury and Leete ore, and is a charcoal furnace. Their motive power is derived from a 40 horse power breast wheel.

Leominster, 21 miles from Worcester and 5 from Fitchburg, a village and town by the same name, of an excellent soil and great water power on both sides of a principal branch of Nashua river. This is the headquarters of the card manufacturers in Massachusetts. A monument dedicated to those killed in the late Rebellion is erected here.

J. P. Lackey, manufacturer of piano forte cases, established business in 1862. He employs 30 hands and occupies 4 buildings. The main building is of wood, 3 stories, 35x 80 feet. The first floor is used for machine work; second floor for the manufacture of cases before they are veneered, and the third floor for veneering purposes. In connection with these, he has 2 dry houses capable of drying 75,000 feet of lumber at one time. Consumes about 300,000 feet of lumber and 15,000 lbs. of glue per year, and has capacity for producing 30 cases per week. Power is furnished by one water wheel (breast) of 60 horse power.

George L. Pratt, manufacturer of chestnut and black walnut chamber furniture; commenced business in 1860, and occupies one-half of a 3 story building 40x80 feet. He employs from 12 to 15 hands. Uses water power, having a fall of 18 to 20 feet.

Jonas Colburn & Son, manufacturers of horn back combs, horn scoops, spoons and spatulas, &c. The business was established by Jonas Colburn, 1826. Their building is 26x48 feet. They employ 20 workmen and do a business of from $10,000 to $30,000 annually. Power is furnished by water power generally, but they have a six horse-power engine, using water power generally, having a fall of twenty feet water. Their goods are sold in New York and Philadelphia.

Partridge Fork Works, established in 1825, Shumway & Co., proprietors, manufacturers of hay, manure, spading

forks, &c., occupy a three story building 40x60 feet for their main shop, together with tempering shop and coal house, comprise all the buildings used by the company. Have in their employ 25 hands. The motive power is furnished from a 55 horse power turbine wheel under 32½ feet head.

G. Morse & Son, business established 1832. They occupy a three story building 45x65 feet, and a one story building 20x30 feet. Employ 50 hands, manufacture combs, buttons and fancy articles from tortoise shell, horn and hoof, and do a business of from $45,000 to $50,000 per annum. Their machinery is run by water power with wheel under 30 feet fall.

EVERETT, 90½ miles from New London, and 9½ from Grouts Corner, a station and town in Franklin County, on the New London Northern Railroad. A good grazing town, watered by Roaring brook a stream on which is a cascade and some wild scenery worthy of the traveller's notice.

EXINGTON, 11 miles from Boston. A village at the terminus of the Lexington and Arlington Railroad, situated in the town of Lexington, which was incorporated in 1812. There are some excellent farms in this town, on some of the branches of the Shawsheen which rise here. Lexington will ever be an interesting place, as here the first blood was shed in the cause of American Independence.

INCOLN, 17 miles from Boston and 33 from Fitchburg, a village and town on the Boston & Fitchburg Railroad. The village is situated about 1 mile from the depot, and contains 150 inhabitants. The town was incorporated in in 1754.

ITTLETON, 31 miles from Boston and 19 from Fitchburg, a village an town on the Boston and Fitchburg Railroad. The village contains about 1200 inhabitants and 3 churches. The town of Littleton has a good soil. There are several beautiful ponds in the town. Littleton was incorporated in 1715. The Indian name was Nashabah.

ONGMEADOW. This town is principally devoted to farming. It is situated about 1½ miles from depot, on the Connecticut river, 4 miles from Springfield and 22 from Hartford, on the New Haven, Hartford and Springfield Railroad. Has about 300 inhabitants and one church.

ONGWOOD, two miles from Boston, a flag station on the Brookline branch of the Boston and Albany Railroad.

OWELL, 29 miles from Boston, 13 from Lawrence, and 46 from Concord. This city, one of the American Manchester's, is situated on the Boston, Nashua and Lowell Railroad, and on the Merrimac river, is remarkable for the extent of its water power, its rapid growth and the height to which it has assisted the American by the perfection of its manufactures. It lies at the union of the Concord river with the Merrimac. In 1815 the site where the city stands was a wilderness with the exception of a few lonely dwellings. In 1824, Lowell, then a part of Chelmsford, was incorporated as a town. In 1835 it became a city. A company was formed and incorporated in 1792, with a capital of $600,000, for the improvement and perfection of hydraulic water power, the natural advantages of which are immeuse. How well they have completed their operations and the benefit derive therefrom can be practically demonstrated to any one who visits this enterprising city to-day. The first cotton mill was erected in 1822.

In 1834, the legislature annexed Belvidere village, making the territory of Lowell containing nearly five square miles. The original territory was four square miles. It is finely situated in regard to health; it is surrounded by pleasant hills and valleys, and seated on a rapid stream and laid out into wide streets; the buildings are of recent architecture and are built in a style of neatness and elegance. The city is well supplied with educational institutions, public associations, societies, &c., &c. There are one high, eight grammar and forty-eight primary schools; 21 churches, viz.: five Orthodox, two Baptist, one Freewill Baptist, eight Methodist, one Free Chapel, Ministry at Large, two Universalists, one Unitarian, two Episcopalian, and two Roman Catholic. The principal associations are as follows, viz.: Lowell Dispensary, organized 1836, for the purpose of furnishing medicine and medicinal advice to the poor gratis.

Lowell High School Association. This is an association of the past members of the Lowell High School; organized 1863. An annual levee is holden in July, of each year.

Middlesex Mechanics Association. Incorporated, 1825. This association owns Mechanics Building, in which is a large hall. Their library contains upwards of 9,000 volumes, and there is in the building a spacious reading room; also, connected with it a cabinet of natural history. A course of public lectures is given annually, under the auspices of the association.

Old Ladies' Home; organized July, 1867. The Home is situated at the corner of Moody and Tremont sts. Religious services are held there every Sabbath by several clergymen of the city.

Lowell Young Men's Christian Association; organized February 4th, 1867. Reading room, library and hall, Barrister's Hall, Central corner Merrimac streets.

Lowell Hospital Association. Organized 1840, by the several manufacturing companies for the benefit and medical care of those who may be sick in their employ.

St. John's Hospital is under the charge of the Sisters of Charity—established May 1st, 1867—located on High street Square. The hospital is now open for the reception of patients of both sexes and of all denominations. The hospital is attended by the ablest physicians in the city, under whose professional and persoual charge the institution is conducted.

St. Peter's School and Orphan Assylum, No. 27 Appleton street, under the charge of the Sisters of Charity.

Lowell Missionary Association, free chapel, Middlesex street. Organized 1843, for the purpose of aiding the worthy poor of the city.

Young Men's Catholic Library Association; hall, 55 Central street; organized for the literary improvement of its members.

Lowell Irish Benevolent Society, Converse Hall, Gorham street, organized for benevolent purposes.

The banks in the city are as follows:

Appleton National Bank, No. 6 Appleton Block, Central street, capital $300,000.

First National Bank, Central, corner Middle street, organized in 1864, capital $300,000.

Prescott National Bank, 26 Central street, incorporated 1860, reorganized 1865, capital $300,000.

Railroad National Bank, Carleton Block, Merrimac street, incorporated 1851, converted 1865, capital $800,000.

The Old Lowell National Bank, Shattuck, corner Middle street, incorporated 1828, capital $200,000.

Merchants' National Bank, Merchant's Bank Building, 43½ Merrimac street, capital $200,000.

The Wameset National Bank, Middlesex street, near Northern Depot, incorporated April, 1853; organized in February, 1865; capital $200,000.

The savings banks are as follows:

City Institution for Savings, 6 Appleton Block, Central street.

The Lowell Five Cent Savings Bank, incorporated 1854, receive deposits in sums of from 5 cents to $1,000.

Mechanics' Savings Bank, Carleton Block, Merrimac street, organized in 1861.

A monument is erected corner Merrimac and Moody streets to commemorate the memory of Addison O. Whitney and L. C. Ladd, who marched from Lowell in the Sixth Massachusetts Volunteer Militia, and fell mortally wounded in the attack on their regiment whilst passing through Baltimore, April 19, 1861.

In 1841, there were 10 corporations with a capital stock of $8,250,000, and 28 mills, containing 150,404 spindles and 4,861 looms. There were 51,147,200 yards of cloth manufactured per annum, 12,220,000 dyed and printed and 16,161,600 lbs. of cotton used annually, besides a large quantity of wool. There were used 11,000 tons of anthracite coal, 4,810 cords of wood, 500,000 bushels of charcoal, 63,489 gallons of oil, 510,000 lbs. of starch.

The number of females employed in the mills was 6,295, males 2,047; total number, 8,342. The average wages of females per week, clear of board, $1.75; of males, $4.80 clear of board.

In 1868, the capital stock of corporations of Lowell was $13,650,000; number of mills, 50; number of spindles, 457,512; number of looms, 12,188. Females employed, 8,980, males, 4,737. Yds. produced per year 116,376,000 of cotton cloth; 1,014,000 of woolen; 1,820,000 of carpets; 130,000 shawls; 312,000 dozen hosiery. Pounds of cotton consumed per annum, 35,104,000; clean wool consumed, 5,148,000; yards dyed and printed, 49,112,000; tons anthracite coal, 38,700; bushels charcoal, 18,800; cords wood, 1,775; gallons oil, 101,376; pounds starch, 2,070,000; barrels flour, 1,415.

Steam power—32 engines—4,425 horse power. Wages of females, clear of board, per week, $3.60 to $3.75; wages of males clear of board per week, $7.20 to $12.00. Medium produce of a loom, No. 14 yarn, yards per day, 45; medium produce of a loom, No. 30 yarn, yards per day, 30. Average per spindle, yards per day 1¼. The population of Lowell in 1826 was 2,000; in 1828, 3,832; in 1830, 6,477; in 1832, 10,254; in 1833, 12,363; in 1837, 18,010; in 1866, 36,827. Males 15,582, females 21,294, polls 8,791, voters 5,556. In 1868, there were 7,000 scholars attending school, 5,324 dwelling houses, 6,400 families. Expenditures for 1868 for schools, $81,924.68. Real and personal estate of corporations, $11,901,639.00. Residents, $10,403,935.00; non-residents, 1,082,073.00. Amount of taxation, $14.10 per $1,000. Amount of taxes for 1868, $346,069.40.

MANUFACTURERS.

Merrimac Manufacturing Co. Incorporated in 1822; capital $2,500,000; George Lyman, of Boston, president; F. B. Crowninshield, of Boston, treasurer; J. G. Palfrey, agent, at mills; Henry Burrows, superintendent, print works. This corporation is situated at the north end of Dutton street. They commenced operations in 1823, and now consists of five mills and print works. This company run 103,000 spindles, 2,500 looms, employing 2,500 hands of which number 1,800 are females. This mammoth establishment consumes per week 85,000 pounds cotton, nearly 190 bales, producing 75,000 yards print goods, No. 30 to 37. The motive power is furnished from six turbine wheels, 5 feet, 4 feet, 8 feet 6 inches diameter, of about 1,800 horse power, two of these turbines made by Gay & Silver, of North Chelmsford, and the balance eight by Lowell Machine shop. The wheels are Boyden's improved, and a 1,000 horse power engine, made by Corliss Engine Company, of Providence.

The mills are all heated by steam from two large boilers, made by Dobbins & Crawford, of Lowell; they also furnish steam to this monster engine.

Their print works which are situated near the mills consists of nearly forty buildings and sheds. Here can be seen more cloth going through the process of dying and printing then at any other works in the country, excepting A. & W. Sprague, of Providence. In the print room they have running 13 machines, each machine driven by a eight horse power engine. They can when necessary set up more printing machines, 20 machines being their capacity.

At the print works they have for furnishing steam 98 boilers, made by Dobbins & Crawford.

They turn out 180,000 yards dyed and printed goods per week.

They annually consume 1,900,000 pounds of madder, 50,000 pounds copperas, 170,000 pounds alum, 160,000 pounds sumac, and 40,000 pounds soap, besides 14,000 tons anthracite coal, 6,000 bushels charcoal, 700 cords of wood, 7,500 gallons oil, 225,000 pounds of starch, and 1,100 barrels of flour.

Hamilton Manufacturing Co. Incorporated in 1825. Capital, $1,200,000. Samuel Bachelder, President, Boston. Eben Bacon, Treasurer, Boston. O. H. Moulton, Agent, at mill. Wm. Harley, Superintendent, at Print Works.

This company run 5 mills and print works, situated on Central street, corner Jackson, manufacturing delaines, flannels, prints, ticks, stripes, drills, worsted yarns, sheetings and shirtings, 5 to 53. They employ 850 females and 425 males, running 51,268 spindles, 1,348 looms, consuming 60,000 lbs. cotton per week and 10,000 lbs. clean wool, producing 235,000 yards of goods per week, of which 160,000 yards are printed and 16,000 dyed.

Their motive power is furnished by 9 Boyden's improved turbine water wheel, of about 1,025 horse power, and from 2 steam engines, of Corliss Engine Co.'s make, of 375 horse power. To furnish steam for these engines and to heat the mills, they use 14 tubular boilers, made by McKay & Aldus, and 2 cylinder boilers, maker unknown. This company keep the operatives warm and furnish steam for print works, consume 3,800 tons coal, 300 bushels charcoal and 100 cords wood. They also consume 5,000 gallons oil, 120,000 lbs. starch, 175 barrels flour and $185,000 for dye stuffs annually.

Suffolk Manufacturing Co. George H. Kuhn, president; Thomas S. Shaw, agent, and Wm. A. Burke, treasurer. This company was incorporated in 1830, and commenced operations in 1832. The company has a capital of $600,000, and have two mills, manufacturing jeans, cotton flannels, denims, sheeting and shirtings, 14 to 24.

Their mills contain 21,532 spindles and 819 looms; employ 500 females and 150 males; turn out 125,000 yards per week, consuming 30,000 lbs. cotton weekly, 1,200 tons anthracite coal, 1,000 bushels charcoal, 20 cords wood, 2,000 gallons sperm oil, and 50,000 lbs. starch. The motive power is furnished from 4 turbine wheels 8 ft. 4 in. diameter, of 680 horse power; and a 400 horse engine, made by the Providence Steam Engine Co., of Providence. For heating the

mill, they have four flue boilers and four engines, made by the Providence Steam Engine Co.

Tremont Mills. In 1830 this company was organized, with a capital of $600,000. Geo. H. Kuhn is president; Wm. A. Burke, treasurer, and Charles F. Battles, agent. This company have two large mills, employing 400 females and 120 males; running 20,960 spindles, 764 looms, manufacturing 130,000 yards per week, of drillings, sheetings, shirtings and cotton flannels; consume 38,000 lbs. of cotton per week. The motive power is furnished from four turbine wheels, 8 ft. 4 in., one turbine 7 ft. 6 in. diameter, of 700 horse power combined.

This company annually consume 800 tons anthracite coal, 400 bushels charcoal, 3,000 gallons oil, and 30,000 lbs. starch. Geo. C. Richardson & Co., selling agents.

Lawrence Manufacturing Co. In 1831, a company was organized under the name of the Lawrence Manufacturing Company, with a capital of $1,500,000. In 1833, they had completed their mill, and immediately commenced operations, manufacturing shirting, sheeting, printing cloth, cotton and merino hosiery. This company run 5 mills and dye houses. The mills contain 60,432 spindles, 1,561 looms and 253 knitting machines. Employ 1,350 females and 350 males, manufacturing 300,000 yards cotton cloth, and 6,000 dozens hosiery per week, consuming 575,000 lbs. cotton, 55,000 lbs. wool, 2 tons anthracite coal, 1,500 bushels charcoal, 60 cords wood, 7,000 gallons oil and 160,000 pounds starch per year. The motive power for this establishment is furnished from 6 turbine wheels 9 feet and 6 breast wheels 17x17 feet. For heating the mill and furnishing steam for the dye houses, they have 9 tubular boilers, made at the Swamscot Machine Co., South Newmarket, N. H. Geo. H. Kuhn of Boston, President, T. Jefferson Coolidge of Boston, Treasurer, Daniel Hussey, agent at the mill; the selling agents are Messrs. Geo. C. Richardson & Co., Boston and New York for cloth, and Townsend & Yale, Boston and New York, hosiery.

Boott Cotton Mills, situated on Armory, foot of John street. This company was incorporated in 1835, with a capital of $1,200,000, for the manufacture of drillings, No. 14; sheetings, shirtings and print cloth 30 to 40. Geo. H. Kuhn, President, R. D. Rogers, Treasurer, A. G. Cumnock, agent. This company run 5 mills; 73,792 spindles and 1,878 looms. Employ 1,310 persons, 290 being males. The average production of this company is 350,000 yards per week, consuming 100,000 lbs. cotton and 1,500 tons anthracite coal, 800 bushels charcoal, 50 cords wood, 8,000 gallons oil and 190,000 lbs. starch per year. The motive power is furnished from 6 turbines 7 feet 8 inches, and 2 centre vent, improved by Mr. Francis, 9 feet 4 inches diameter; and 1 Warren's turbine wheels. In the machine shop they have a small engine of 20 horse power, made by Otis Tufts, furnished with steam from a flue boiler made by the Lowell Machine Shop.

The Middlesex Company was incorporated in 1830, for the manufacture of broadcloth, doeskins, cassimeres, and shawls, with a capital of $750,000. This corporation is situated on the left bank of the Concord river, front facing on Warren street. This company run 4 mills and dye-houses, under the charge of G. V. Fox, Agent. J. M. Little, President; R. S. Fay, Treasurer. The company run 55 set woolen cards, 16,400 spindles, 250 broad cloth and 50 narrow looms, giving employment to 320 females and 452 males. It requires 25,000 lbs. wool per week to keep the mills running, and turn out on an average 13,000 6-4, 2,000 3-4, 2,500 square shawls per week. The motive power is furnished from 1 Warren turbine wheel and 5 breast wheels, 12 and 17 feet; also, 1 Otis Tufts engine of 80 horse power. The mills are all heated by steam in the most thorough manner from 9 flue boilers, made by the Lowell Machine Shop. These boilers also furnish steam for the engine and dye houses.

The company consume annually 1,500 tons anthracite coal, 500 bushels charcoal, 175 cords wood, 1,123 gallons spindle, 553 sperm, 16,000 red, and 5,500 gallons lard oils; also 1,000,000 teasles, 1,300,000 lbs. fine wool, 18,000 lbs. glue and $50,000 worth dye stuffs. It takes on an average $23,000 monthly to sustain the pay roll.

In 1839, The Massachusetts Cotton Mills were incorporated, and in 1840 operations were commenced. This corporation is situated at the junction of the Merrimac and Concord rivers, between Merrimac and Bridge streets, and is under the charge of James Lawton, Superintendent. In 1842 the Prescott Cotton Mills were incorporated, and in 1843 they commenced building, and in 1846 this mill was united to the Massachusetts, both mills retaining the names they were organized under, but are under the control of one Board of Directors. The Prescott Mills are situated on Merrimac street, on the left bank of the Concord river, and is superintended by Mr. E. Boyden.

The company have a capital of $1,800,000, and are under the following officers: John A. Lowell, Boston, President. Homer Bartlett, Boston, Treasurer. Frank F. Battles, Agent, at the mills. Frothingham & Co., Selling Agents, Boston. The corporations consists of 6 mills, running 67,872 spindles, 1,869 looms, manufacturing sheetings, shirtings and drillings, 12 to 22; have used from 8 to 27. They give employment to 1,700 persons—1,300 being females. This corporation produces, on an average, weekly, 540,000 yards. The amount of stock consumed per year is as follows, viz.: Cotton, 9,360,000 lbs. or 26,000 bales; anthracite coals, 1,300 tons; charcoal, 800 bushels; wood, 100 cords; oils—various—6,500 gallons; starch, 220,000 lbs. or 110 tons; flour 40 barrels.

The motive power is furnished the Massachusetts Mills from three turbine wheels, made by Lowell Machine Shop. These are, two 9 feet diameter and the other 7 feet, of 1,474 horse power combined.

The mills are heated by steam from 6 tubular boilers, 18 feet long, 4 feet diameter, made by Swamscot Machine Co. These boilers also furnish steam for dressing room. At the Prescott Mills, the motive power is furnished from 6 breast wheels, 17 and 16 feet, and 5 turbine wheels. Also, a 200 horse power Corliss engine. Seven tubular boilers, made by Swamscot Machine Co., furnishes steam for heating mills, dressing room; also for driving the engine.

The American Bolt Co. commenced business in 1853, John Holt, R. H. Butcher, and James Minter proprietors, manufacturers of railroad, bridge, and other bolts, nuts, screws and washers. The business was established by Smith & Meadowcroft, about 20 years ago. Their works are situated at Whipple's mills, 210 Lawrence street, where they have the facility for turning out on an average 5,000,000 bolts per year, consuming from 1,200 to 1,500 tons of iron. They employ 100 hands.

The motive power is furnished from a 28 feet diameter, 14 feet face breast wheel, of 75 horse power.

Chase Mills, A. H. Chase, proprietor, commenced business in 1863 for the manufacture of fancy cassimeres. In January, 1866, Mr. Chace had the misfortune to be burnt down, but rebuilt in the spring and summer of the same year. His mill is situated on Lawrence street, rear of the American Bolt Company. He runs 10 sets of cards, 4,020 spindles, and 71 looms, employs 200 hands, three-fourths being females, consumes about 450,000 lbs. of wool per annum, and produces about 350,000 yards ¾ goods.

The mill is heated by steam from a tubular boiler made by the Swamscot Machine Co. This boiler also furnishes

steam for the dye house and for the steam engine, which is used to when needed. The engine is of 100 horse capacity, and was made by the Corliss Steam Engine Co. He also derives his motive power from a Kilburn & Lincoln's turbine wheel, of 54 inch, 24 feet head, of 100 horse power.

R. KITSON commenced 14 years ago on Broadway in a very small way to manufacture cotton and woolen machinery. In 1860 he removed to his new works, corner of Dutton and Northern sts., where he has large substantial buildings filled with heavy machinist tools, built mostly by the Putnam Machine Co. The motive power being furnished from a 30 horse power engine, made by the Putnam Machine Co. The buildings are heated by steam from 2 tubular boilers made by William Dobbins, of this city. Mr. Kitson employs 140 hands, and at present is building two English lappers per week.

FAULKNER'S MILLS. This mill was built in 1864 by L. W. Faulkner, and took the firm name of L. W. Faulkner & Son in 1867. It is 5 stories in height, 95 feet long, and arranged for 6 sets of woolen machinery, only 4 of which are run at the present time. The goods manufactured are fancy flannels, double and twist spring cassimeres, and table covers, employ 60 hands, run 4 set cards, 8,200 spindles, one 120 twister, 26 broad looms, clean wool carded on an average 500 lbs., and 1,000 yards goods produced daily. A boiler of 160 horse power, made by Dobbin & Crawford, supplies steam for heating and drying purposes. The motive power to drive the machinery is furnished by a 4 feet Fall River turbine water wheel, under 22 feet fall.

STOTT'S WOOLEN MILL, Charles A. Stott, proprietor, manufacturer of flannels. Mr. Stott commenced business in 1867, running a 7 set mill, containing 2,560 spindles and 38 looms. The mill is situated at Whipple's Mills, employs 65 hands, and produces 600,000 yards ¾ goods per year. Consumes 220,000 pounds clean wool, 50 barrels lard oil, and $30,000 worth of dye stuff per annum. The motive power is furnished from a 40 horse breast wheel, 25 feet diameter, 15 feet face, built by Hunt, Flint & Waite, of Orange, Mass.

BELVIDERE WOOLEN MANUFACTURING CO., Charles Stott, agent; E. Farnsworth, treasurer, M. P. Wilder, president. This company was incorporated in 1852, capital $200,000. They run two mills and dye houses; one situated on Howe street, the other on Lawrence street, at the Wamesit Power Co. At both mills they employ 200 hands, run 15 sets woolen machinery, 5,600 spindles, and 90 broad looms, consuming 1,200 pounds clean wool per day, and producing from 100,000 to 120,000 yards per month, manufacturing all wool flannels. The motive power is furnished at the Lawrence mill from a Kilburn & Lincoln (of Fall River) turbine wheel. The mill is heated by steam from a McKay & Aldus boiler. The lower mill on Howe street, is furnished with three tubular boilers for heating the mill, also to drive a fifty horse power engine, built by Otis Tufts of Boston; this in connection with a Fall River turbine wheel furnish the motive power.

SAMUEL CONVERS, carryall, buggy, chaise, sleigh and harness manufacturer. The business was established in 1826, at 163 Central street, by John Mixer, and continued since 1828 by Mr. Convers, who has a large building running through to Gorham street, covering 22,000 feet roofing. The front of the building is nearly all windows, giving sufficient light to enable the workmen; also, making the show rooms pleasanter. Mr. C. employs 40 hands. His carriages and sleighs are built mostly to order, so are his harnesses, and for durability they are not excelled.

E. G. COOK commenced business at Ayers city in 1863, for the manufacture of upper leathers. In 1864 he had the misfortune to be burnt down, but immediately rebuilt, and within nine months from time of fire he had erected a building, 40x198, 2 stories, containing 35 string vats. He has 30 England wheels for turning stock while in the vats, this saves considerable labor in handling the hides. Attached is the beam house, 40x44, 2 stories, and connected with the beam house is the boiler room, 15x36, 2 stories, containing 3 tubular boilers, one made by Chubbuck, one by Dobbins & Crawford, and the other in New Bedford. These boilers are used for heating the building, furnishing steam for the leaches, and to drive an 80 horse power engine of Tuft's pattern, made at the Atlantic Works. Connected with the main building is the leach house, 16x90, 1 story, containing 7 leaches, holding 42 cords bark each, scouring house, 25x45 feet, 1 story. All the finishing is done in the second floor of main building. Mr. Cook also has 2 tan houses, 2 store houses, sheds, &c., employs 125 hands, and finishes 1,000 African and 750 slaughtered hides per week. Consumes 30 bbls. extract bark, 15 bbls. of oil, and 10 bbls. tallow per week.

LOWELL MACHINE SHOP. Incorporated 1845, with a capital of $600,000. The business was established by the Locks & Canal Co., in 1824, then employing 100 hands, the business increased beyond their expectation, and at the time they sold out they employed 300 hands, 4 large machine shops, boiler shop, smithy and foundry have been erected by the Lowell Machine Shop, and filled with both heavy and light machinery of their own make, driven by 2 turbine wheels 6 feet 10 inches diameter and 1 breast wheel 13x13; combined horse power 240. They employ 950 hands, and can turn out machinery complete for a mill of 6,000 spindles inside of 3 months. They manufacture, cotton machinery, paper and woolen machinery, machinist tools, turbine wheels, boilers, engines, &c., &c. Their works are situated on Dutton street, and cover with the the yard room about 7 acres of ground. They have tracks laid, running to different points in the yard, connecting with the main tracks of the Boston and Lowell road, which runs within a few yards of their office.

The company owns land opposite of their works on Dutton street, where they have erected 76 dwellings for the use of their help only. This is the largest machine shop in New England, if not in the country. They consume annually 4,000 tons cast iron, 70 tons steel, 20 tons brass castings, 4 tons wrought and 500,000 feet lumber to keep up the fires for boilers, having 3 tubular boilers for heating their buildings, melting iron, &c. They use 2,500 tons anthracite coal, 350 tons Smith's coal, 6,000 bushels charcoal, 300 cords wood and in oils 4,000 gallons per annum.

ARTISTON GROVER, steel letter and stamp cutter, for stamping steel, iron, &c., also branding. Commenced business in 1853. Now occupies the first floor of building No. 134 Middlesex street. Mr. Grover is the only man who carries on the letter cutting in Lowell. He employs three hands, and cuts on an average 75 letters per day.

HILL BROS. commenced the manufacture and repairs of carriages and sleighs in 1867. They occupy part of two buildings, 134 and 136 Middlesex street, employing 10 hands. Most of the work of this firm is repairing carriages and sleighs. They also run a blacksmith's shop in connection, for shoeing horses. They generally make 10 sleighs and about the same number of carriages, per year.

B. S. HALE & SON, manufacturers of insulated copper and iron ware, for galvanic batteries, &c., laid cord, twines, fish lines, &c., &c. They occupy a two story building, 25x30, which they have filled with machinery for covering wire cords with silk, woolen, cotton, or worsted; also, for making fishing lines, chalk lines, &c; they employ six hands. Their works are situated at the Wamesit Power Co., who furnish them with power

S. R. Bracket commenced business in 1859, for the manufacture of worsted yarns, occupying a building, 100x40, ell 50x50, one story and basement, situated on Wamesit Power Corporation, who furnish them with motive power to drive their machinery, which consists of eight sets of worsted machinery. Employ 40 hands, and produce 400 lbs. yarn daily.

Samuel Pearson commenced business in 1868, occupying a two story and basement building, 75x25, situated at the Wamesit Power Co., where he manufactures worsted yarns, employing 16 hands, and producing 100 lbs. yarn per day. The motive power is furnished him by the Wamesit Power Co.

John Holt commenced in the rear of Howe street, on the right bank of the Concord river in 1865, for the manufacture of flannels from 5 to 7 run. Mr. Holt runs 2 set cards, 800 spindles, and 12 looms, consuming about 190 lbs. scoured wool per day, producing 48,000 yards ¾ flannels per week, and employing 30 hands.

His motive power is furnished from a 42 inch turbine wheel, made by T. Russell, of Northfield, Vermont, of 20 horse power; also a 25 horse engine, made by J. Simson, Lowell. The mill buildings are heated by steam from a flue boiler, made by Ashton, of Lowell. This boiler also furnishes steam for the engine.

Geo. Naylor commenced business in 1847, in Danvers, Mass.; he removed to Lawrence in 1855; after stopping in Lawrence 2 years he, in 1857, removed to Lowell, on Crosby street, at the Wamesit Power Company, occupying a building, 75x30, 3 stories, and a 2 story building, 75x24. Mr. Naylor employs 75 hands manufacturing carpets; runs 2 sets cards and 25 looms.

The motive power is furnished by the Wamesit Power Company.

Geo. Ripley & Co. commenced business in 1860 for the manufacture of cotton batting, wadding and paper. The business was established by A. J. Richmond & Co. Their wadding and batting mills are situated on Thorndike street, near the junction of Gorham and Central streets, where they employ 60 hands. The machinery is driven by a 40 horse power engine, made at the Putnam Machine Co. Works, furnished with steam from 2 tubular boilers, made by Pitkins Brothers & Co., of Hartford. The capacity of this mill is 3,000 lbs. wadding and batting per day.

The paper mill is situated in Dracut, 2 miles from Lowell, driven by 2 turbine wheels of 100 horse power.

Their office is at No. 10 Middle street.

James Irish & Co., commenced business in 1868, on Lawrence street, at the "Whipple Mill," for the manufacture of cardigan jackets and worsted yarn, commenced business in 1866, at Westford, employs 15 hands, run 1 set of cards, 2 machines for making jackets, consume 250 lbs. wool per day, producing 4 dozens jackets and 1,200 pounds yarn per week. The motive power is furnished from a 25 horse turbine wheel; also scour about 1,000 lbs. daily, having an upright tubular boiler made by Dobbins & Crawford, for heating the mill and for scouring wool.

J. E. Griffin & Co., commenced business in 1868, on Howe street, occupying a room on the first floor of building owned by John Nesmith, for the manufacture of wooden pumps. They employ 3 hands, and manufacture on an average 5 pumps per month.

Thos. Atherton & Co., jack screw manufacturers, commenced business in 1865. They occupy the second story of John Nesmith's building on Howe street, which they have filled with machinery, such as lathes and bolt machinery to enable them to carry on their work. They employ only 3 hands.

Richards, Moulton & Colburn, commenced business in 1866, on Howe street, occupying the 3d floor of John Nesmith's building, where they manufacture strengthening plasters, both "Poor Man's" and "Arnica," the latter being the leading plaster. They employ 5 hands, and produce on an average 3 gross per day.

G. W. Pease, commenced business in 1866, for the manufacture of all kinds of paper boxes; occupies a room in the 3d and 4th stories of Appleton Block, No. 2 Central street, employs 30 hands, producing 2,500 boxes of various sizes per day.

James Dugdale. In 1860, Mr. Dugdale commenced the manufacturing of worsted yarns, alpacca braids, &c., at Whipple's Mills. In 1868, he removed to the corner of Willie and Broadway, in building formerly occupied by the Lowell Arms Co.—a company that was. The main building is 100x40 feet, 3 stories and attic, with addition 40 x 40, 1 story; store house 40x60, three stories. Also, wool sorting house. Employs 90 hands. His machinery consists of 1 Lister patent wool comber, with 12 spinning frames, and preparer and twister for same, and 150 braiding machines, driven by a 40 horse power engine, made by Otis Tufts, of South Boston, furnished with steam from 1 flue and 1 tubular boiler. These boilers also furnish steam to heat the buildings. Mr. D. consumes 200,000 lbs. combing wools per year, manufacturing yarn from No. 16 to 44.

Crosby Furniture Co., manufacturers of black walnut chamber sets, show cases, &c., commenced business in 1868. Established about 30 years ago by George Crosby & Co., and continued under the Crosby Furniture Co., by D. S. Kimball & Co. They occupy a room in the second story of Mechanics Building, where they employ 20 hands in the manufacturing of first-class goods.

J. S. Jaques & Co. commenced business in 1865, for the manufacture of cotton and woolen shuttles. The business was established in 1830, by E. R. Douglass & Co., and in 1833, J. S. Jaques succeeded to the business, and continued until 1865, when his son, F. Jaques and one other person were admitted into the firm. Their works are situated at the Wamesit Power Co., who furnish them with the motive power. They occupy a 2 story building 40x30 feet, L 40x 20 1 story, employing 12 hands, and producing 150 shuttles daily. Mr. J. has made several improvements in his shuttles, and has taken out 2 patents. One on a patent twist socket tip, the other a patent cop spindle that will prevent cop waste. These shuttles are largely used, by some of our largest manufacturers.

D. C. Brown commenced business in 1836 for the manufacture of reeds, wire heddles, loom harness, and harness twine. He occupies 2 stone buildings, 27x87, 2 stories in front and 4 in rear, and 60x20, 3 stories and 4 in rear, situated corner of Church street and Warren, the Concord river running in the rear of the buildings. He employs 15 men and 9 girls. The latter help in knitting the heddles, and in shafting the harness. Mr. Brown has 4 patent knitting machines, the capacity of which is sufficient to make all the harness used in Lowell. For making wire heddles Mr. B. invented a machine in 1863, which is a great improvement over all other machines. This machine, by a peculiar twist, brings the eye of the heddle in such a shape that there is no danger of its breaking, or catching warp thread. The eye in this heddle is near perfection, if not perfect. He made his first machine in 1864, and since that time he has completed nine, and is now is on his tenth. Produces about 6,000 heddles per day of wire from No. 20 to No. 30.

His works are heated by steam from a flue boiler, 16 feet long 42 inches in diameter, made by Lowell Machine Shop. This boiler also furnishes steam for an 8 horse en-

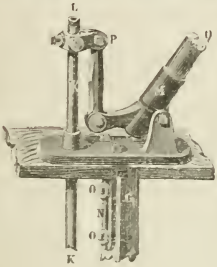
The American Submerged Pump.

FOR FIRE, SHIP, FACTORY, DISTILLERY, HOUSE, FARM AND IRRIGATING PURPOSES.

DOUBLE ACTING, NON-FREEZING FORCE PUMP,

Manufactured by the

Bridgeport Manufacturing Company, Bridgeport, Conn. - - - Office, 55 Chambers Street, New York.



BRAKE.

This valuable invention supercedes all other Pumps in use for any purpose at the present time. Its principle is that of a Double Acting Force Pump, with a heavy, double acting Piston cast in one piece, and a double acting metal valve within the same, *without the use of leather Valves, or any Packing whatever.* It has been the aim of the company to construct it on scientific principles. It has stood the test of Civil and Mining Engineers, Insurance, Lloyd's Surveyors and the United States Life Saving Commission of 1867. Scientific men, mechanics and farmers, on examination of the principle, say "It is the simplest mechanical combination that they ever saw."

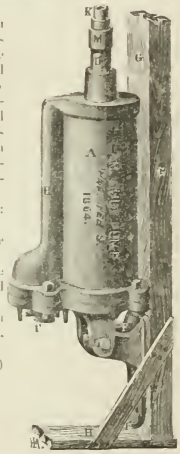
Simplicity.—The entire pump has but Seven parts: all of metal.

Never Freezes.—No water remains in the pipe when not in motion.

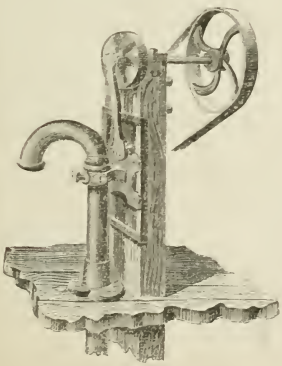
Power.—For the power applied, it throws twice the amount of water of any other pump in the market, and will throw a stream from 60 to 70 feet in the air.

The arrangement of the valves is such that it is less liable to choke with sand, mud, grain or shavings than any other pump. It is therefore recommended to shippers of grain, coal, &c.

Two men can pump against 200 pounds pressure to the inch, with the small size (No. 1) Pump.



HOUSE PUMP.



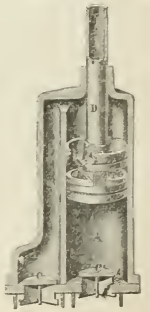
MANNER OF APPLYING POWER TO THE AMERICAN SUBMERGED PUMP.

PRICES.

SHIP AND FACTORY PUMPS.—Throwing from 2 to 16 barrels per minute. Prices, **$30** to **$300.**

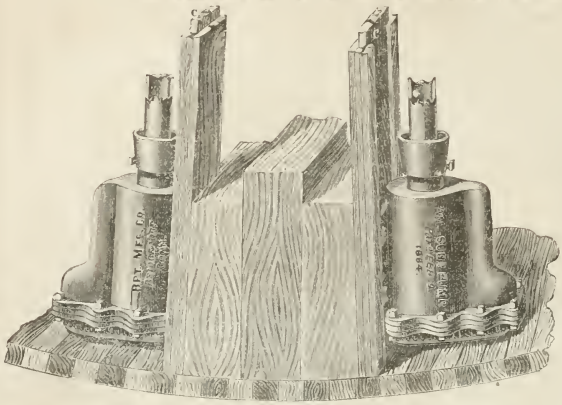
HOUSE AND FARM.—Throwing from 12 to 70 gallons per minute. Prices, **$10** to **$36.**

Every Pump Sold by us is Warranted.



SECTIONAL VIEW.

TESTIMONIALS.



MANNER OF SETTING SHIP PUMPS.

C Is a plank to which the Pump is fastened, to be drawn on deck at pleasure.

Office of the Bureau Veritas of Paris Lloyd Universal.
No. 45 Kilby Street,
Boston, Feb. 6, 1868.

Gentlemen:—I have examined the working of your Submerged Pump, also visited several vessels which have it on board. From my own observation, and the reports received from the Masters of the above vessels, I cordially recommend it, both for its GREAT VALUE and ECONOMY in use.

EBEN HOWES,
French Lloyd's Surveyor.

Boston, Jan. 17, 1868.

Gentlemen: — I have with great interest examined your American Submerged Ship Pump, in full operation. I consider it the best pump I have ever seen, as to the steady and large volume of water delivered, its simplicity and great labor saved, which is the desideratum on ship board. No clapper getting off. No packing. No drawing of boxes to clear the clapper; and placed below freezing point. As to Force and Head Pumps on board ship, it cannot be equalled. *It is the Pump!* My experience is based upon over half a century's experience on ship board.

JOHN DEVEREUX, Surveyor American Lloyds.

Pacific Pump Manufacturing Co., Office 319 *California St., San Francisco, Cal.*

To the Pacific Pump Manufacturing Co. Gentlemen: The schooner Gen. Harney, lying between Pacific and Jackson Street wharves, whilst being hove down for repairs, careened so much as to completely fill her hold with water, amounting to 145 tons. The pair of No. 3 American Submerged Pumps, which you promptly furnished me enabled me to free her entirely of water in TWO HOURS AND TEN MINUTES—one man at each pump. No vessel should go to sea without them, as they are very easy of action, and do not get out of order. I want a pair of No. 1 for permanent use. Thanking you for the great service rendered me in the loan of your pumps, I remain,

Gratefully yours, (signed) D. C. LIBBY.
Master of Schr. Gen. Harney.

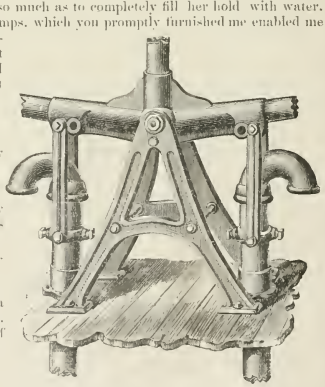
Being present, and knowing the above statement to be true, we fully endorse the same. MOORE, PORTER & CO., Carpenters.
M. P. HOWE, Shipmaster.

I am aware of the above statement, and unhesitatingly say that they are the best pumps that I have ever seen in my experience of fifty years sea life. JAMES KEARNY,
Agent and Surveyor for American Lloyds.

San Francisco, California, Nov. 26, 1868.

Bridgeport Manufacturing Co.—Gentlemen:—We have made a success with a No. 4 Pump on the Central Pacific Railroad, at Reno. It pumps a 2½ inch stream through 375 feet of hose, giving upwards of *Ten Thousand Gallons* per hour.

PACIFIC PUMP MANUFACTURING CO.



SHIP BRAKE FOR TWO NO. 4 PUMPS.

Manufactured and Sold by

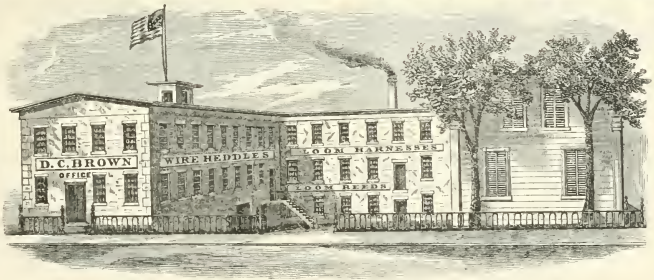
THE BRIDGEPORT MANUFACTURING COMPANY,

BRIDGEPORT, CONNECTICUT. - - - - **OFFICE, 55 CHAMBERS STREET, NEW YORK.**

James Wilson, *President.* Chas. F. Mudge, *Sec'y and Treas.*

D. C. BROWN,

ESTABLISHED IN 1836.



PATENTED MAY 2ST, 1862.

Patentee and Sole Manufacturer of Improved

PATENTED WIRE HEDDLES,

For Cotton or Woolen, warranted not to catch the Warp Thread in the Eye.

ALSO, WEAVERS' REEDS, LOOM HARNESSES AND HARNESS TWINE.

OFFICE AND MANUFACTORY,

CHURCH, corner of WARREN STREET, near Middlesex Mills, LOWELL, MASS.

gine, which drives the machinery. The engine was built by John Simson, of Lowell. At the fair of 1867, Mr. Brown received of the Middlesex Mechanics' Association 2 diplomas and silver medals on a case of wire harness, and on his heddle machines, also at the fair of the American Institute of New York a bronze medal, and diploma on his heddle machine.

Messrs. Whiting & Co. manufacturers of patent stretch leather belting, commenced business in 1864 on Shattuck street, occupying a room on the first floor, employing 6 hands. His leather is all finished by John Ingham, who occupies a 2½ story building, 50x40, corner Mount Vernon street and Broadway, near the Lowell Gas Works, who employs 4 hands.

The Wamesit Steam Mill, situated on Willie, corner Dutton street. This building was erected by N. B. Favor & Son, Parker & Cheney, Isaac Place and M. C. Pratt & Co., who formed a company so as to get the power cheaper, and they also have rooms with power to rent. Each party pays according to the amount of power they use. This establishment is driven by a 125 horse power engine, made by John Simson, furnished with steam from three tubular boilers made by the Swamscot Machine Co., South New Market, N. H.

Isaac Place commenced business 28 years ago, at the Middlesex Mills. In 1842 removed to the Mechanics' Mills, thence to the Wamesit steam mill in 1857, occupying a three story building, 50x50, employing 33 hands, manufacturing doors, sash and blinds. Mr. Place's machinery consists of 2 planing machines, 3 power mortising, 3 tenoning, 4 sash sticking machines, 1 blind slat tenoner, 1 blind slat mortiser, 1 pat blind style borer, 1 boring machine, 1 dove-tailing machine, 1 swing saw for cutting up stock, 5 circular saws and table for squaring up and splitting lumber. Mr. P. intends to produce monthly 1,300 doors, 1,300 sash and 800 pr. doors.

J. G. Peabody commenced business in 1854 at the Wamesit Steam Mill, occupying two stories of building, 43x50, and renting third story to the Furniture Co. Mr. P. manufactures doors, sash and blinds, doing a busines of $30,000 per year. Besides the usual machinery required by manufacturers of doors, sash and blinds, he has a veneering press for veneering walnut doors, doing quite a business in this branch alone.

Trowbridge & Kimball, manufacturers of cabinet furniture, chamber sets, &c., commenced business in 1868. The business was established in 1865, by D. S. Kimball; occupy the third floor, over Mr. Peabody, in the Wamesit Mill; employ eight hands, turn out 100 chamber sets per year. They also manufacture D. S. Kimball's patent cotton and woolen card screens.

Reed & Hallowell occupy the upper floor of a 3 story stone building, located on Fletcher street, Mechanics' Mills, for the manufacture of steam, gas, and water fittings, also sole manufacturer of Hallowell's patent gas heater and improved globe valve. Commenced business in 1867, and have 7 employees. The power is furnished from an engine belonging at the works.

F. S. Perkins manufactures engine lathes, planers, and general machinery. Commenced business in 1862, occupying the stone building belonging to the Mechanics' Mills situated on Fletcher street. Employs 35 hands, consumes 10

S. C. SMITH,

MANUFACTURER OF

MACHINE SCREWS,

Mt. Vernon St., near Lowell Gas Works, Lowell, Mass.

POST OFFCE ADDRESS—BOX 1132.

Machinists using my regular Stock of Screws, consisting of Square Head Milled Cap Screws, with finished and unfinished heads, Square Head and Headless Slotted Case Hardened Set Screws and Taps, will realize the advantage of getting their orders filled without delay, and at a much less cost than when made to order. Large stock constantly on hand.

I make to order of Norway and Low-Moor Iron, Hexagon Head Screws of superior quality, for Steam Engines, Fire Engines, Tools, &c. Parties ordering this class of Screws, will please be particular to state the style of finish wanted, and, if case-hardened, whether to be left in color or re-polished.

tons iron and steel per month, doing a business of $45,000 per annum.

S. C. Smith commenced business in 1866, as a manufacturer of machine screws. He occupies a room on the first floor of George T. Comin's brick building, on Mount Vernon st., near Lowell Gas Works. Mr. Smith having been in the machinists' business for several years, and like other machinists constantly obliged to use machine screws of all sizes, that were ordered, or brought for one and the same size, it had often occurred to him that if some manufacturer would put into the market, screws of good quality, milled and cut true, with good proportional and well finished heads, and continually make his screws precisely like his first sizes, so that machinists once fitted with taps, would be sure, in ordering at any future time, to get good fitting screws, he would secure a patronage that would compensate him for his efforts.

With this view he has fitted up tools and is now making both cap and set screws as true and perfect as engine cut screws. He is also making for steam engines, very nice screws, six-square heads, finished to guage, case-hardened, and left either in colors or re-polished.

Mr. Smith uses Norway, Low-Moor, Taylor's Yorkshire and Bromford iron, to the amount of about 16 tons per year.

He is at present employing 10 hands, but as the demand for his screws are constantly increasing, he will soon enlarge his works.

B. F. Stevens commenced the manufacture of shafting, pulleys, steam engines, &c., in 1851, occupying the lower floors of two 2 story buildings, 60x30 feet each, with a blacksmith's shop and ware room attached, 35 feet square, situated on Arch street, near Northern Depot. His machinery is driven by an engine of 10 horse power, built by himself, tubular boiler, 15 horse power, built by Dobbins & Crawford, of city.

George L. Cady occupies one floor 104x45 feet in a 3 story building, located on Middlesex street, at No. 237, and known as Allen's mill, for the manufacture of machinists' tools, loom harness, belt hooks, screw eyes, &c., employing 18 hands, consume about 20 tons of iron per annum, doing business to the amount of $15,000. The machinery consisting of lathes, planers, drills, &c., is driven by an engine of 80 horse power in building adjacent.

Joel Jenkins occupies a 2 story wood building 50x30, with smith shop attached 40x18, 2 stories, also carriage shop 38x24 feet, 2 stories, situated at No. 1 Arch street. Mr. Jenkins commenced the manufacturing of carriages in 1829. Employs 14 hands and does a business of $20.000 per annum.

Davis & Melendy commenced the manufacturing of packing boxes in 1866, occupying the lower floor of a two story wooden building 120x40, situated at No. 241 Middlesex street. Have 30 employees, consume about 1,500,000 feet lumber per year, do a business of $100,000 per annum. Their machinery is driven by an engine of 80 horse power built by Bird & Co. of East Boston, furnished with steam from 4 flue boilers, 100 horse power combined. This firm are also dealers to a great extent in lumber.

David Lane commenced business in 1850, for the manufacture of woolen and worsted machinery, occupying a 3 story wooden buildings 80x50, situated on Fletcher, corner Cushing street, employ 37 hands, and do a business of about $40,000 per annum. The motive power is furnished from an engine in building adjacent.

Wm. Robinson occupies a room in the Mechanics' Mill, 52x25 feet, located on Fletcher street, corner Dutton street, for the manufacture of wood-working and worsted machinery, employing 10 hands. The business was commenced in 1850.

J. A. Knowles, Jr., occupies a 3 story brick building, located at Mechanics' Mills, on Fletcher street, No. 20. Mr. Knowles commenced the manufacture of portable and counter scales, from 2 oz. to 2,000 lbs., in 1860; now has 8 employees, and is doing business to the amount of $25,000 per annum.

Marshall & Crosby commenced the manufacture of cabinet furniture in 1864, and have 35 employees. They occupy a 3 story frame building, 60x25 feet, and a room in a 2 story frame building, 233 & 264 Middlesex street; consume 150,000 feet lumber annually, doing business to the amount of $45,000. Power is furnished from an 80 horse power engine in a building adjacent.

Appleton Co. Incorporated and commenced business in 1828; capital $600,000. Geo. Motley, treasurer; J. H. Sawyer, agent. This company run three mills, manufacturing sheetings, drillings, and shirtings, Nos. 14 and 34, containing 122,708 spindles, 714 loooms, employing 400 females, and 120 males. This company produces 160,000 yards cloth per week, consume 70.000 lbs. cotton per week, 600 tons anthracite coal, 500 bushels charcoal, 2,000 gallons oil, and 75,000 lbs. starch per annum.

The motive power is furnished from 5 turbine wheels.

Lowell Manufacturing Co. Incorporated and commenced operations in 1828, capital $2,000,000, manufacturers of carpets, sheetings, and stuff goods. D. B. Jewett, treasurer, Boston; Samuel Fay, agent at the mill. This company runs 1 spinning, 1 carpet, and 1 fine worsted mill; spindles, 12,500 worsted and wool, and 2,816 cotton; looms, 258 power carpet, 1,264 cotton, and 50 stuff goods; employ 1,000 females and 450 males; produce 35,000 yards of carpets, 13,000 yards sheetings, and 4,500 yards stuff goods

LOWELL

BOLT AND SCREW

MANUFACTORY.

PEABODY & COMPANY, PROPRIETORS.

Manufacturers of Bolts, Nuts; Set, Lag and Cap Screws, Washers, &c.

LOWELL, - - - - - - - - - Massachusetts.

per week; consume 4,000 lbs. cotton, 63,000 lbs. clean wool per week; 3,500 tons of anthracite coal, 2,000 bushels charcoal, 70 cords wood. Oils, 2,400 gallons red, 6,000 sperm, 1,200 olive, and $100,000 worth of dye stuff per annum.

Motive power is furnished from 3 turbine wheels, 7 feet 4 inch diameter, and one do. 8 feet 4 inch diameter, and 2 engines of 600 horse power.

PEABODY & COMPANY, manufacturers of bolts, nuts, cap, sag and set screws, washers, &c., commenced business in 1865, and have 8 employees. They occupy a room 50x45 feet, in 3 story brick building known as Allen's Mills and located at No. 237 Middlesex street, and do business of $18,000 per annum. Their machinery is driven by an engine in building adjacent.

LOWELL BLEACHERY. Incorporated and commenced business in 1832. Capital $300,000; number of mills 4 and dye works. Employ 40 females and 360 males, 15,000,000 yards dyed, 8,000,000 lbs. bleached per annum. Consume 6,000 tons of anthracite coal, 200 cords wood, 2,000 gallons oil, 100 bbls. flour, and 1,000,000 lbs. starch per annum. Power furnished from a Warren turbine wheel and from 2 engines of 740 horse power.

RUNELS, CLOUGH & Co. occupy about 10,000 square feet of room, located on Thorndike street, for the manufacture of carved and hammered granite for buildings, cemetery, and monumental works; commenced business in 1841, have 100 employees, and do a business of about $150,000 per annum.

HOWE & GOODHUE commenced business in 1849, for the manufacture of machine card clothing. The business was established by White & Puffer. Messrs. H. & G. occupies 2 floors of building Nos. 90 and 92 Market street, run 45 machines, each machine capable of making about 4 square feet per day, employ 10 hands. Their machinery is driven by a 5 horse power engine built by Thayer of Salem, furnished with steam from a tubular boiler 10 horse power made by Dobbins & Crawford of this city. Messrs. Howe & Goodhue, do a business of about $100,000 per annum.

JOSEPH GREEN occupies a frame building 35x35, located at No. 8 Hale street, where he employs 8 hands, in the manufacture of all kinds of rugs, and door mats, made from wool and hemp, produce annually about 10,500. Mr. Green commenced the business in 1865.

MEADOW RIVER MANUFACTURING CO. J. McDonald, Proprietor, commenced the manufacture of rugs and door mats, both wool and flax at No. 10 Hale street, in 1863, occupying a 2 story frame building 36x24, employing 10 persons, producing 18 dozens mats per week, motive power furnished from an engine of 5 horse power, built by Campbell, Whittier & Co. of Boston, Mass.

N. B. FAVOR & SON, manufacturers of doors, sash and blinds and hard wood veneered doors, commenced business in 1852, occupy a 3 story brick building on Dutton street, at Wamesit Steam Mills, employ 36 hands, consuming about 600,000 feet of lumber annually. Their machinery consists of 3 mortising machines, 3 tenoning, 9 saws and tables, 2 planers, 5 moulding machines, 1 jig saw, 1 patent blind style borer, capable of boring 4,000 holes an hour, 1 blind flat moulding machine, 2 groovers, 1 machine for raising door panels, 2 blind staple machines, 1 pivoting machine. The power for driving their machinery is furnished from the engine belonging to the mills. Messrs. F. & Son, do a business to the amount of $80,000 per annum.

M. C. PRATT & Co., commenced business in 1856, for the manufacture of doors, sash and blinds, mouldings and brackets, occupying 3 floors in building 43x100 feet, situated at the Wamesit Steam Mill. They run three planers, 3 moulders, 2 mortising machines, 2 tenoning machines, 1 irregular moulder, 1 jig saw, 1 scroll saw, 7 saws and tables, 1 blind mortising machine, 1 clapboard planer, 2 blind style boring machines, capable of boring 4,000 holes per hour, 1 grooving and matching machine, employ 35 hands and do a business of $70,000 per annum. Motive power furnished by the Wamesit Steam Mill.

S. ASHWORTH & Co., commenced business in 1849, manufacturing of and recutting of all kinds of files, employ 16 persons and produce on an average 150 dozen files per week, occupy room in Mechanics' Mills on Fletcher street.

JOSIAH GATES & SONS occupy as a tannery a 3 story wooden building and basement, with an L 57x37 feet, in which are 25 vats, situated on Chelmsford street. They also occupy the lower floor and basement of a 3 story brick building 60x44 feet, located at Nos. 4 and 6 Dutton street, and manufacture leather belting, fire engine hose, lacing, &c. Also are dealers in manufacturers supplies. They have 30 employees with a capacity for producing 40,000 feet of hose per year, and do a business of $300,000. An engine of 25 horse power built by Thomas F. Burgess & Co. of this city; supplied with steam from a tubular boiler 25 horse power, built by Dobbins & Crawford, also of this city; furnish impetus for their machinery.

LOWELL FOUNDRY, Cole & Nichols, proprietors, occupy an iron foundry, 100x100 feet, with an ell 74x35 feet; a pattern shop 55x30 feet, three stories; brass foundry, 42x21 feet, two stories, and built of wood, with out buildings, store houses, &c., covering an area of 20,000 square feet of land, and located at the corner of Willey and Dutton streets, and manufacturers of every description of iron and brass castings; also, the Swaine patent turbine wheel. They commenced business in 1857; have 65 employees, and turn out about 15 tons of castings per week, doing business of $70,000. Motive power derived from an engine belonging to the Wamesit Steam Mills in building adjacent.

C. B. RICHMOND commenced business in 1855 for the manufacture of manilla paper, the business was established by his father 30 years ago at Massic Falls, on the Concord river. His works contain 4 engines for beating and grinding pulp, with a machine for manufacturing paper; turns out 1 ton of paper per day, employs 8 hands. His machinery is driven by two 4 feet Blake wheels, under 8 feet head.

PARR & WILBY,
Manufacturers of best
OAK TANNED LEATHER BELTING, WORSTED APRONS, ROLLER COVERS,
Best quality of
BELT AND LACE LEATHER,
And Dealer in Manufacturers' Supplies,
132 MIDDLESEX STREET, LOWELL, MASS.

The Swamscot Machine Company, of South Newmarket, N. H., furnished him with a tubular boiler for drying and heating the mill.

PARR & WILBY commenced business in January, 1869. They occupy a room 35x70 feet, in a three story wooden building located at No. 132 Middlesex street, and manufacture superior oak tanned leather belting, railroad bell cords, loom strapping, sewing machine belting, &c.

MILTON ALDRICH commenced business in 1848. He occupies two floors of a three story wooden building, 110x35 feet, and manufactures every variety of wooden screws and clamps' employing 10 persons.

WM. WALKER & CO., situated in the same yard with and owned by Mr. Richmond, is a woolen mill, run by Messrs. W, & Co., who commenced manufacturing tweeds and cassimeres in 1862. Their No. 1 mill is 64x36 feet, 2½ stories, of brick; No. 2, 72x40 feet, 2 stories and basement, of stone. The mills contain 4 set woolen cards, 1,600 spindles and 24 broad looms. Consume 226,000 lbs. wool in grease per year, producing 200,000 yards ¾ goods, from 6½ to 10 oz. Employ 52 hands. The motive power is furnished from a Blake wheel and Swaine wheel, 5½ feet diameter, 8 feet fall, 45 horse power combined. For heating and dying they have a tubular boiler, made by Dobbins & Crawford, of Lowell. Faulkner, Kimball & Co., of Boston and New York, selling agents,

PARKER & CHENEY occupy a three story wooden building 60x50 feet, with an ell 40x20 feet, located in the Wamesit Steam Mills, Dutton street, where they employ 80 persons in the manufacture of bobbins, spools and shuttles, used in the manufacture of cotton, wool, silk, flax, hemp and jute. They commenced business in August, 1853, and turn out about 150,000 bobbins and 10,000 spools per annum, doing business of about $90,000. This firm also occupy 2 large store houses opposite their works.

WM, MANNING commenced business 22 years ago for the manufacture of corn cake, candy, &c. He commenced business in a small way, furnishing the store-keepers of Lowell with his cakes and candy. He now has a building, 100x40 feet, 2 stories, situated on Broadway, employs 15 hands, and consumes 150 hhds. molasses per year, and from 2 to 3 bbls. popped corn per day, producing in busy season 40,000 cakes per day. He also manufactures a patent combination cake, popped corn and cocoanut mixed, turning out several cans of this latter cake every day.

JOHN STEVENS. Mr. Stevens is one of the oldest leather belt manufacturers in Lowell, having commenced in 1843 in a small shop which formerly stood where the Northern depot now stands. In 1848, in consequence of erecting this depot, he removed to Fletcher street, corner of Western avenue. He now employs 25 hands and produces 1,500 feet belting per month; also, makes from 300 to 400 hand-knit loom harnesses per month.

JOHN N. PIERCE commenced business in 1835, in the manufacture of wool machinery, more especially the making of cam looms. His shop on Howe street, was at the beginning a small frame building, which was removed to give place to a substantial stone building of two stories 100x70 feet, with 2 ells 50x25, 1 story each, and large store house 3 stories 100 feet square, now in use for the storage of second hand wool machinery, in which he is constantly dealing. The articles now made by him are looms, fringe-twisters, flock-cutters, filling-winders, in the making of which he employs from 15 to 25 hands. His machine shop contains 30 engine lathes, 2 planers, 4 circular saws and tables, driven by a 36 inch turbine wheel of 25 horse power.

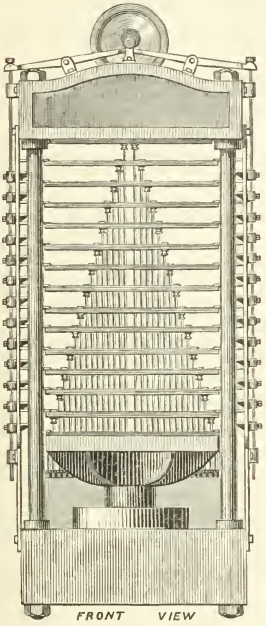
MECHANICS' MILL, 5 buildings belonging to A. L. Brooks, situated on Dutton street, corner Fletcher street, below the Merrimac street depot. These mills are so called from their being occupied by mechanics who manufacture sash, doors, blinds, furniture, machinery, bobbins, &c., &c. The size of the different buildings are as follows, viz.: No. 1, 136x100, 3 stories; 2d 50x100, 2 stories; 3d 43x100, 3 stories; 4th 35x80, 3 stories; 5th 36x65, L 25x30, 3 stories. The motive power is furnished from a 65 horse power steam engine, made by Hill & Andrews of Salem. Most of the buildings are heated by steam from 4 flue boilers made at the Lowell Machine Shop. These boilers also furnish steam for the engine, and to the different departments for heating glue, &c., &c. Mr. Brooks has an office on the first floor of building on the corner of Dutton and Fletcher streets, also occupies most of Nos. 1 and 2, buildings which he has filled with machinery for planing lumber, employing 75 hands and producing 4,000,000 feet, finished lumber per year. His saw mill is situated on the right bank of the Pawtucket Canal, fronting on School street, where they employ 30 hands. At these works, their machinery is driven by a 50 horse power engine, made by Andrew & Burnett of Salem, furnished with steam from 3 flue boilers made by Lowell Machine Shop. Mr. B. commenced business in 1832, using at that time one of "Woodworth's patent planers," he being the second party in New England, who planed with a rotary machine. Soon afterwards he took out a patent on a machine of his invention that would plain both sides at once. At the time of commencing he had only one hand and his works were situated in Belvidere, but in 1833 he removed to Hurd street, into a larger building, on the Middlesex Corporation, and in 1846, he with his partner E. Tyler, built the No. 2 mill on Fletcher street, since that time his business has steadily increased, and now he is one of the largest lumber men in Lowell. He also manufactures about 1,000,000 feet lumber per year into boxes.

THE manufacturing of sash, doors and blinds was commenced in 1843, by WM. KELLY, who occupies the second story of No. 4 Building, situated on Dutton street; employs 15 hands, and runs 2 mortising machines, 1 tenoning machine, 1 patent blind style borer, 2 planers, 2 common sticking machines, 1 groover, 1 blind staple machine, 1 swing saw for cutting up stock, and 4 saws with tables. The goods made by Mr. Kelly are shipped mostly South.

EDWARD F. WATSON commenced the manufacturing of bobbins in 1857, at the Wamesit Steam Mill, in company with George W. Fiske. In 1860, Mr. Fiske sold his interest to Parker & Nichols, under the name of Watson, Parker & Nichols, and in 1863 Mr. Watson retired from the firm

AMERICAN

STEAM PRESS PLATE CO.



Patented January 26th, 1869, (No. 86,334,) by

C. H. Weston

AND

JOHN DENNIS,

Lowell, Mass.

Also, by

C. H. WESTON.

March, 16th, 1869.

To all parties interested in

Dyeing & Finishing Woolen, Worsted, Cotton, Mixed Goods, Hosiery, &c.

We would call Attention to our Greatly Improved

Welded, Hollow Steam Press Plates & Connections!

Also, PRESSES, for Operating the same.

Either Hydraulic, (of the greatest power,) or a most superior Hand Press, from 50 to 250 tons pressure, to which power may be applied by belt and pulley, whenever desired.

(See page 287.)

BENJAMIN LAWRENCE.

MACHINIST,

And Manufacturer of

ENGINE AND HAND LATHES, PLANERS,

—ALSO,—

WOOD WORKING MACHINERY,

Mount Vernon Street, near Lowell Gas Works, Lowell, Mass.

and removed into No. 4 building of Mechanics' Mills, occupying the first floor; employing 20 hands, and produces on an average 100,000 bobbins per month.

ASAHEL DAVIS commenced business in 1856, on Market street, and removed to the Mechanics' Mill in 1863, occupying the second story of No. 5 building, on Fletcher street, where he manufactures A. & A. Davis's improved patent dovetailing machines, planers, magneto-electra machines for medical purposes, saw arbors, guides, &c.; employs 10 hands.

BENJ. LAWRENCE. Machinists' tools and wood-working machinery, such as wood-turning and moulding machines. He removed to Mr. Comin's building about 1842. Mr. L. employs 8 hands and, in 1868, produced 15 wood-working machines and 1 heavy planer.

S. COMIN in 1867 built a brick building, two stories, 130 x40, situated on Mount Vernon street, near the Lowell Gas Works, which he rents with power to Messrs. SMITH, LAWRENCE & SAWYER, machinists, who occupy the first floor, the second story being unoccupied. He also furnishes power to Messrs. Carey & Harris, and Messrs. Batchelder & Co. In the rear of the main building is the boiler house, 40x30, one story, and engine house, 18x35.

His engine was made by Tufts, and has a capacity of 60 horse power. He has two tubular boilers, made by William Dobbins, of Lowell, for furnishing steam to the engine and to heat the buildings.

HUBBARD & BLAKE commenced business in Agus City in 1857, occupying 2 buildings, situated on Lincoln street. They manufacture patent leather, and employ 20 hands, and produce on an average 350 sides leather per week. For heating they have an upright flue boiler, made by Dobbins & Crawford of Lowell.

CAREY & HARRIS, manufacturers of patent wood-working machinery, commenced business in 1867; occupy a 2 story brick building 80x36, situated on Broadway, corner Mt. Vernon street, employ 14 hands. They also manufacture harness shafts and slats for spring beds. Power furnished by T. Comin.

H. J. SAWYER, machinist and machinery manufacturer, commenced business in 1854 on Fletcher street. In 1855, he removed into Geo. T. Comins' building on Mt. Vernon street, occupying a room on the first floor; employs 3 hands and makes many patent machines.

A. BACHELDER & CO., manufacturers of bungs, plugs, wedges, &c., for Government inspectors of liquors, oils, flour, &c., and for shippers, canlkers, &c. Occupy a 3 story stone building 100x40, situated on Mt. Vernon street, near the gas works. Employ 20 hands, runs 8 machines for turning out 40 of more different sizes of bungs, plugs, &c. Motive power furnished by T. Comin.

T. F. BURGESS & CO., manufacturers of portable, gang, and circular saw mills, steam engines and machinery in general, occupy 2 floors 140x54 feet, in a 3 story brick building known as Allen's Mills, and located at Nos. 233 and 235 Middlesex street.

The double gang saw mill made by them is a portable, stationary, steam or water mill, as parties may desire, being furnished with portable or stationary boilers, or when worked by water, with improved turbine wheel. Being built almost entirely of iron and steel, and so constructed as to depend only on one set of floor and foundation timbers, it dispenses entirely with the large, heavy and expesuive building which is required for any other gang mill, the building alone often costing as much as the machinery. These mills being very compactly built, occupy (exclusively of the ways for the log cars) a space on the floor of only 10 feet 3 inches by 4 feet, and are all fitted, set up and put in operation in the manufacturer's shop, all the parts having been put together and intelligibly marked before being taken down, so that any ordinary mechanic, with the aid of the lithograph, and the help of the millmen required to run them, can put it in operation in less than one week after its arriving on the ground, dispensing entirely with a gang of millwrights and carpenters, some two to four mouths, which are considered necessary in building mills of ordinary construction. They claim that there is no machine now built, which will do the work of these mills, with the same number of pounds of steam or inches of water, being capable of cutting from 35 M to 50 M feet (according to the quality of logs) of perfect boards in eleven hours. They also claim that the great saving of time and cost of erecting a large building and putting the ordinary machinery in, together with the exceeding low price of our mills, make them the cheapest and most economical of anything of the kind now built.

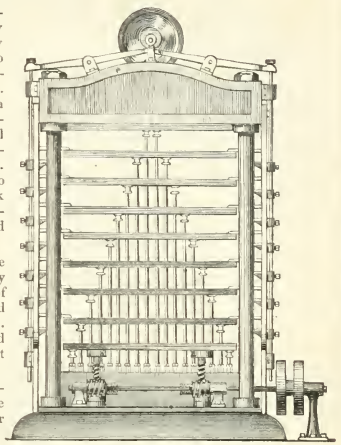
This firm commenced business in 1865, and have 30 employees; consume about 200 tons of iron annually, and do business amounting to $75,000. Their machinery is driven by an engine of 25 horse power in building adjacent.

C. H. WESTON occupies the upper floor of a two story stone building, 70x35 feet, with a blacksmiths' shop 40x20 feet, situated on Arch street, near Northern depot, for the manufacture of welded, hollow, steam press plates, used in the dyeing and finishing of woolen, worsted, cotton and mixed goods; also, a superior coupling for rubber pipe. Hand or power presses, of from 50 to 150 tons pressure, besides 40 different kinds of belt makers' tools, which are extensively used in all parts of the United States and London. The steam press plates patented January 26th, 1869, are in use by the A. & W. Sprague Manufacturing Co. and Wanskuk Co., of Providence, R. I.; the Pacific Delaine Mills, of Lawrence, Mass.; Hunt & Tillinghast, of New York City; the Lowell Carpet Mills, of this city, and numerous other manufacturing concerns. Mr. Weston commenced business in 1859 and has 20 employees. The motive power is furnished from an engine in building adjacent.

A. J. HISCOX commenced business in 1863, and manufactures files of every description. He occupies the lower floor

HAND OR BELTED PRESS.

FROM 50 TO 250 TONS PRESSURE.



The Plates are Hollow. Steam for Heating and water for Cooling are connected through a single Box, which greatly facilitates the heating and cooling, (on which a fine finish greatly depends,) and also entirely prevents the collection of *Dead Air*, to which other forms are so liable. They are made in a superior manner, being welded on edges and the centres well bound by rivets. They are made of any size desired, and uniformly 3-4 and 1-16 inch thick. The last Patent, dated March 16th, 1869, is a good improvement and superior to any others manufactured. The Solid Welded Boss or Connections are positively safe from leakage, while the Riveted Bosses or Connections are liable to leak and damage the goods. The arrangement of our Patented Plate is considered to be easier to circulate, consequently saving steam and water, also doing the work much quicker. Our Connections do not require the Plates to be removed from the Press to repair, which often does occur with Riveted Connections.

The **Connections** for the admission of steam and water are of the simplest and most effective kind. Being connected directly with the steam and water chest ensures a constant transmission of either element, and without a possibility of getting out of order, and affording facilities for repacking unequalled by any other system. The plan for retaining the Plates in their position, when *down*, and the method of raising them for the adjustment of the goods, is at once cheap, simple and effective.

The **Improved Steam Press** can be filled Six Times during the period now occupied in filling other presses once, and the saving in time and expense will be found to be upwards of 50 per cent.

For valuable improvements in the Plates and Connections a Patent was issued March 16, 1869. It is believed by good judges to be the best arranged Plate now used in this country or Europe.

—o—

We also have a very superior

COUPLING FOR RUBBER PIPE.

Which will be used on the Connections, whenever desired.

The **Presses** are of the Improved Hydraulic, of any size or power that may be desired. The **Hand or Belted Presses** are from 50 to 250 tons pressure, to which also power may be applied in any ordinary way. These we believe to be superior to any others. They have an *upward* pressure, and are worked (when by hand) with the common Crank Handle, operating either by miter, straight gear, or worm and wheel, directly with the screw, making a continuous motion, thereby securing fully 50 per cent. in time over the common lever and ratchet press, and being of much greater power.

☞ We have also a very good arrangement for a *downward* Press for the accommodation of those having the old style of Presses and wish to use in them the Improved Plates and Connections, which will greatly facilitate their business and have all the advantage of the superior finish given by the Hollow Steam Press Plates.

The ***Superiority of Work*** and the ***Liberality of Prices***, we believe cannot fail to give satisfaction.

—o—

REFERENCES:

PACIFIC MILLS, Lawrence, Mass., W. C. Chapin, Agent.
LOWELL CARPET MILLS, Lowell, Mass., S. Fay, Agt.
HAMILTON PRINT WORKS, Southbridge, Mass., Joshua Ballard, Treasurer, Boston.
SALISBURY WOOLEN MILLS, Salisbury, Mass., John Gardner, Treasurer, Boston.
WASHINGTON MILLS, Lawrence, Mass., W. H. Salisbury, Agent.
WANSKUK COMPANY, Providence, R. I.
A. & W. SPRAGUE, Providence, R. I.
ARNOLD PETERS, Providence, R. I.
HUNT & TILLINGHAST, New York.
BOOTH & VALENTINE, (Hosiery.) Bennington, Vt.
E. C. CLEVELAND & CO., Manufacturers of Wool Machinery, Worcester, Mass.
CHARLES G. SARGENT, Manufacturer of Wool Machinery, Graniteville, Mass.

Address

C. H. WESTON,
AMERICAN STEAM PRESS PLATE CO.,
LOWELL, Mass.

(See page 285.)

SAMUEL HORN & CO.,

Manufacturers of

HARD, SOFT, SODA AND AMMONIA SOAPS AND TALLOW CANDLES.

——ALSO, DEALERS IN——

HIDES, TALLOW AND CALF SKINS,

Near Corner of Middlesex and School Streets, Lowell, Mass.

SAMUEL HORN, - - - - - - - - - - - - ALFRED S. HORN.

of a three story wooden building, 70x35 feet, located at No. 132 Middlesex st., and has 30 employees, turning out about 240 dozen files per month.

GEORGE W. HARRIS occupies a two story wooden building 40x80 feet; also, a room in the Lawrence Corporation 70x 32, used as finishing room, for the manufacture of loom harnesses, runs 22 knitting machines capable of turning ont 200 sets print harnesses per day, consuming from 80 to 100 lbs. of twine; employs 60 hands, and does business of $75.000 per annum. Mr. Harris commenced business in 1859.

H. R. BARKER & Co., manufacturers of and dealers in wrought and galvanized iron, steam and gas pipes, &c. They occupy rooms in building situated on Middle street, employ 30 hands. Motive power furnished from 20 horse engine, built by themselves, with steam from a tubular boiler.

AMOS SANBORN & Co., manufacturers of plain and engraved silver forks, spoons, ladles, fancy knives, coin silver knight templar jewels, &c. This business was established on Merrimac street by Mr. Sanborn in 1846, where he continued until 1853, having in his employ some 15 persons, and requiring more room he was compelled to enlarge his borders, and fitted up his present location, corner of Central and Middle street as a salesroom for the display of his own ware, and the general silver ware and jewelry business, with better facilities for a manufactory in the rear. In 1866 Mr. H. B. Bacon became associated in the business. They use steam power for rolling and preparing their metal.

LOWELL CARD CO. This company occupy a building, 113x30 feet, 2 stories, situated on Middle street, where they employ 11 hands manufacturing card clothing for cotton and woolen goods, producing about 112 square feet per day. The business was established in 1865. Motive power is derived from a steam engine of 10 horse power.

LOWELL STEAM BOILER WORKS. The business and manufacturing of boilers was established by Stephen Ashton, in 1854, and about four years ago, Dobbins & Crawford became the proprietors, under the title of the Lowell Steam Boiler Works. They occupy a building 36x100 feet; office, pattern house, and store house additional, situated on Dutton street, near Mechanics' Mills; employ on an average 16 hands, manufacturing steam boilers of all kinds, water tanks, patent steam press plates, rotary bleachers and steam cylinders for steaming prints and de laines, This firm consume boiler-plate and wrought iron to the amount of $16,000 per annum; castings to the amount of $6,000; blacksmith's coal, &c., $1,200. They turn out 26 boilers, 20 tanks, 70 steam press plates per annum; besides smoke pipes, window shutters, foundry saddles, etc., etc., amounting to about $40,000. Machinery driven by an engine of 15 horse power, steam furnished from a 42 inch diameter 12 feet long tubular boiler.

LOWELL FELTING MILLS: William H. Thompson, proprietor. 16 Pemberton Square, Boston, Mass. M. A. Johnson, manufacturing agent, Lowell, Mass. They manufacture all kinds of hair felt of a superior quality, such as boiler felt, pipe, roofing, truss, dry sheeting and tarred felt, &c., &c. Their extra quality boiler felt has been adopted as the standard by the government, and their ordinary they claim as superior to any other now made.

NORCROSS & SAUNDERS, (successors to Fiske & Norcross who commenced the business in 1845.) manufacturers and dealers in lumber. They occupy buildings of the following dimensions, saw mill 80x92 feet, two stories high; planing mill and box shop 80x80 feet, one story. They employ from 65 to 75 hands, and saw about 200,000 feet of lumber per week. the power is furnished by an engine of 125 horse power and one engine of 40 horse power, also by six flue boilers. The large engine is of Wright's patent.

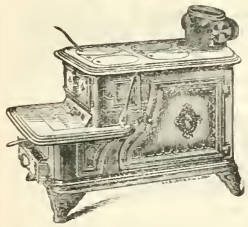
A. J. HISCOX, file manufacturer, commenced business in this place in 1863. Has a branch shop at Worcester, Mass., established 1866, which is run in connection with the business here. He occupies a three story wooden building 35x 70 feet, at 132 Middlesex street, one of the principal business streets of Lowell. Employs about 30 hands. A large part of the business has been re-cutting, but with his well-arranged shop and close proximity to the railroad, he is prepared to manufacture with despatch all kinds of hand-cut east steel files and rasps of a superior quality.

PREVIOUS to 1866, no bunting was manufactured in the United States, and up to that time no American ship had sailed or fought under a yard of American bunting. Many attempts had been made to produce it, but not until the manufacture was undertaken by the UNITED STATES BUNTING Co. of this city, was an article produced which could compete with that of foreign manufacture. "The flags which beckoned our soldiers to victory, or stood guard over our nation's citadel, or cheered the hamlets of her defenders during the rebellion, were alike the product of foreign skill, obtained by foreign permission, and that too of a nation which at that time held to us very questionable relations." The above company commenced the manufacture of bunting in January, 1865. They occupy 3 buildings, run 28 frames, employ 30 males and 90 females, use 300,000 pounds of wool annually, the capacity of the works per day being 13,-000 yards, an engine of 150 horse power, Wright's patent, made at the Washington Iron Works and 2 turbine wheels made by the American Water Wheel Co., supply the motive power. This company manufacture flags for all the government departments.

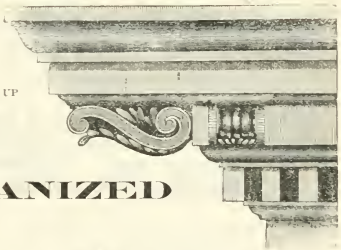
SAMUEL HORN & Co. occupy a two story wooden building 30x55 feet, with an ell 35x25 feet; also, have a candle factory and storehouse 35x40 feet, two stores, and manufacture hard, soft and ammonia soap and tallow candles; also, a scouring soap for woolen purposes. They commenced business in 1829, have 8 employees, and produce 96,000 lbs. of soap, and 125,000 lbs. of candles per annum, consuming 72,000 lbs. of tallow and grease. The soda soap manufactured by them is of a superior quality, and is extensively used in the manufacture of print cloths. Do business to the amount of $100,000 per annum.

THE UNITED STATES CARTRIDGE CO., was incorporated Jan 1, 1869. D. W. C. Farrington, Treasurer. They manufacture breech loading ammunition; occupy 3 factories.

S. G. MACK,



MANUFACTURES AND PUTS UP



GALVANIZED

SHEET IRON CORNICES,

BEAUTIFUL AND CHEAP.

Window Caps, Brackets, &c.

Stoves and Fence.

123 MARKET STREET, LOWELL, MASS.

L. G. MACK commenced business in 1867 as successor of Cushing & Mack, who established the manufacturing of galvanized cornices, window caps, brackets, iron fences, roofing, &c., &c., also gasometers. He occupies 2 buildings as follows: office and salesrooms, 60x90 feet, brick, 1 story workshop, 30x50, also of brick; employs 25 hands. Mr. Mack makes a speciality of galvanized sheet iron building fronts, also their application for various ornamental purposes, the iron being made into proper shape by machinery, made specially for the purpose. He is also manufacturing galvanized iron ventilators.

JEREMIAH CLARK commenced the manufacture of improved twine, knitting and tidy yarns, &c., in this city in 1867. He occupies part of the 3 story building, 115x30 feet, 96 Middle street, employs 7 hands, runs 4 spinning frames, 4 twisters, 1 spooler, 1 skein winder, 1 doubler, and 2 banding machines, driven by a 10 horse power steam engine; steam furnished from a tubular boiler. Mr. Clark is also engaged in manufacturing Down's combination hinge and fastener for windows. This hinge is so made that it is impossible for the blind to sag, the bottom part extends the full width of the blind, receiving the fastener about midway. It requires no mortising or cutting of the blinds, and is easily put in and adjusted. (See pages 290, 291.)

LUENBERG, 42 miles from Boston and 8 from Fitchburg. A flag station on the Boston and Fitchburg Railroad, in a town by the same name. The soil of this town is good, the surface uneven and watered by some branches of the Nashua. Incorporated 1728.

LYNN, is picturesquely situated on an extensive plain, stretching along the northern shore of Massachusetts Bay, having charming marine views in front, and elevated, romantic woodlands in the rear. Within its borders are several little lakes and streams; and indeed hardly any feature is wanting that can add vigor or beauty to a landscape. Within the last few years it has been much resorted to by summer visitors of taste and cultivation, not only for its attractive scenery, but for its facilities for sea bathing and general healthiness. It is ten miles northeast of Boston, on the line of the Eastern Railroad, and has constant communication with that city by steam and horse cars.

Lynn was one of the earliest of the settlements in Massachusetts, as distinguished from Plymouth, the plantation having been commenced in June, 1629. Farming was the chief occupation of the settlers for many years. But shoe making was early introduced, and, from one cause and another, even before the revolution, became the largest industrial pursuit of the people, at least in a mechanical way. In 1767 there were made here, 80,000 pairs; and in 1810, 1,000,000. From that time to this the manufacture has kept pace with the increase of population, until in 1868, between 11,000,000 and 12,000,000 pairs were made, valued at $18,000,000. They were, with the exception of some men's slippers, almost exclusively for female wear, and both boots and shoes are included in the enumeration. A considerable portion of the shoes now made are of much better quality and higher cost than those formerly manufactured, a fact which should be taken into account, in estimating the magnitude of this branch of industry. There are some two hundred manufacturers, and many of them employ machin-

JEREMIAH CLARK,

Manufacturer of

IMPROVED TWINE,

Of all numbers, for Loom Harnesses and Rotary Sewing Machines. Plain and Fancy Twine, for Warps, Nets, and other purposes.

KNITTING AND TIDY YARNS.

BANDING,

FOR RING, FLIER, AND MULE SPINNING.

Prompt Attention to all orders. The Best is the Most Profitable.

96 Middle St., Lowell, Mass.

cry in almost every department. The number of operatives, male and female, appears to be a little over 17,000.

Lynn adopted the city form of government in 1850, having at that time a population of 14,257. The last official census was taken in 1865, at which time the number was 20,800. At the present time, June, 1869, the population will doubtless reach 25,000. The assessor's valuation for 1868 gives real estate $10,562,962; personal, $5,548,837; total, $16,111,709. It has 22 churches, 3 banks of discount and 2 savings institutions, a police court, established in 1849, gas works for lighting the streets, business places, and villages, beautifully-located cemetery, with numerous costly monuments; a public library, and telegraph wires communicating with all parts of the country; a stately city hall, erected in 1867, for municipal purposes, at a cost of something rising $300,000; a sufficient number of well-appointed and well-conducted schools to furnish all with means to gain a good education, of which there are 41; viz.—1 high, 6 grammar, 33 intermediate, and 1 mixed; an efficient fire department, provided with steam fire engines; and, indeed, all the other appurtenances that seem necessary for a busy and thriving population. The streets, for the most part, are capacious and level, and kept in remarkably good condition; and, though the buildings are chiefly of wood, many of them are large and tasty. Brick has, however, of late been more than formerly used in the construction of business buildings, but still Lynn is pre-eminently a "wooden city." A full history of this ancient and now conspicuously thrifty place has been published in an octavo volume of 620 pages.*

MANUFACTURERS.

L. G. Swett & Co. This firm commenced business in 1838 for the manufacture of children's shoes. They occupy a four story frame building 90x60, situated at Nos. 33, 35, and 37 Union street. When in full operation, this firm employ 400 hands, turning out 15,000 pairs shoes per day. Their machines are driven by a 10 horse power engine built by the Putnam Machine Co., of Fitchburg, Mass., furnished with steam from a 40 horse tubular boiler, built by McKay & Aldus, of East Boston. This firm do a business of about $400,000 per annum.

Office, in Boston, 90 Milk street. In the making of the shoes they have 40 sewing machines of different patterns for stitching, &c. Their goods are made principally for the western and southern trade.

George F. Beede & Co. occupy a four story brick building known as Bubier's Block, located at Nos. 94 and 96 Market street, where they manufacture ladies', misses' and children's boots and shoes. The business was commenced by this firm in 1863. Employ when in full operation, 150 persons.

Sanderson Brothers, occupy four floors of building known as Bubier's block, for the manufacture of ladies' boots and shoes. They commenced business in 1958, employing when in full operation 100 persons. This firm does a business of about $200,000 per annum.

Wm. A. Chase. The manufacturing of misses and childrens' boots and shoes was commenced by Mr. C. in 1840. He occupies a three story building 50x20 situated at 36 Exchange street. In the busy seasons Mr. C. has 150 employees, turning out 100 cases per month.

Pevear & Co., occupy a four story frame building as a beam-house and finishing-house 112x42 feet; also a four story frame building used for tannery, 40x100. Engine and boiler-room 36x30 of brick. This firm commenced business in 1847 at Stetsonville, for the manufacture of goat and calf skins. They give employment to 90 persons; tan 1,000 skins per day. This is the largest firm of the kind in New England, and the office and sales room are on Milk street corner of Congress street, Boston.

From a 60 horse power engine built by the Putnam Machine Company of Fitchburgh, they derive their motive power, the steam for the engine and to heat the building is furnished from two tubular boilers, built by Wm. E. Maynard of East Boston. This firm do a business of about $350,000 per annum.

S. Q. Morse commenced business in 1847 for the manufacture of ladies', misses' and children's boots and shoes, occupying one floor in a four story brick building, 50x30, situated at Nos. 76 and 78 Market street. Employ 25 hands, and produce 250 pairs shoes per week. Do a business of upwards of $60,000 per annum.

C. J. Bartlett occupies a three story frame building 44x22, located at No. 14 Willow street, for the manufacture of ladies', misses' and children's boots and shoes, employing 50 hands, producing 3,000 pairs per month. Mr. Bartlett commenced the business in 1855, and now does a business $50,000 per annum.

Shute & Faulkner commenced business in 1854 as manufacturers of kid, goat and morocco leather, occupy a 5 story frame building 26x60, situated on Washington street, near

* Can be procured only by addressing James R. Newhall, of this city.

JEREMIAH CLARK,
Manufacturer of DOWN'S COMBINATION

Hinge and Fastener,

For Window Blinds.

A Sure Support

And Complete Fastener.

Patented, September 22d, 1868.

With this Hinge it is impossible for blinds to sag. The bottom part extends the full width of the blind, and receives the Fastener Latch about midway. It requires no mortising or cutting of the blind. They are very easily put on and adjusted.

96 MIDDLE STREET, Lowell, Mass.

Boston street; employ 14 persons and produce 1,000 skins per week. The business amounts to about $50,000 per annum.

R. B. Morse occupies two rooms in a building located at No. 85 Broad street, for the manufacture of ladies' boots and shoes. He commenced business in 1865. When in full operation, employs 25 hands.

G. G. Newhall occupies a 3 story wooden building 45x22, situated at No. 12 Railroad Avenue. Mr. Newhall commenced the manufacturing of ladies' and misses' Congress and Balmoral boots and shoes in 1858. He employs in his busy season 125 hands, turning out on an average 3,000 pairs boots and shoes per week, doing a business of $60,000 per annum.

David Knox. In 1855 the manufacturing of boot and shoe machines was commenced by Mr. K. His works are located at No. 4 Washington street, occupying a 4 story frame building 50x25, employs 15 hands and turns out 5 machines per month. Mr. K. makes a speciality in the manufacturing of leather sole cutting machines, dies, &c., for same; consumes 4 tons iron per month. From an upright engine of 15 horse power made by the Globe Works, South Bostou, he derives his motive power, a 30 horse power tubular boiler, made by Wm. H. Dobbins of Lowell, furnishes steam for the engine, also for warming the rooms. His business is about $15,000 per annum.

Foster & Whitten occupy the upper floor of a two story building 30x20, located at No. 22 Market street, for the manufacture of McKay machine needles and awls. This firm commenced business in 1867, now employing 7 hands, turning out about 3,000 needles and the same amount of awls per week. Their machinery is driven by power furnished from building adjacent.

Moses Norris & Son. The manufacturing of kid, goat and morocco leather was commenced by this firm several years ago. They are occupying a building situated at No. 25 Market street, 80x30 feet, three stories. In their works they employ 14 hands, producing from 500 to 600 skins per week. This firm do a business upwards of $50,000 per annum.

Augustus B. Martin, occupies a three story frame building 60x30 feet, situated at No. 30 Market street, where he manufactures kid, goat, calf, morocco and sheep skins, employing 40 hands, producing about 300 dozen skins per week. He commenced business in 1855 in a small way, and as his business increased he added to its capacity. If his establishment is not the largest in Lynn, it is one of the best managed tanneries in the State. His business amounts to $200,000 per year. His motive power is furnished from a 14 horse-power engine, furnished with steam from a 35 horse-power tubular boiler, built by William E. Maynard, of East Boston.

Jacob S. Wentworth, manufacturer of kid, goat, morocco and sheep skins; commenced business in 1845. His establishment is situated at Nos. 34 and 36 Market street, a frame building 32x32 feet, two stories. Employs twelve hands, turning out from 300 to 400 skins per month, and does a business to the amount of $75,000 per annum.

S. J. Hollis occupies at three story frame building, 35x25, situated at No. 68 Market street, where he manufactures ladies', misses' and children's gaiters. He commenced business in 1860, producing 50,000 pairs shoes, amounting to a business of $80,000 per annum.

Philip Sherry occupies a three story frame building, 65x20, situated at No. 54 Market street, for the manufacture of kid, goat and morocco leather. Employs 6 hands, turning out about 1,400 skins per month. Mr. Sherry commenced business in 1865, and does a business of $20,000 per annum.

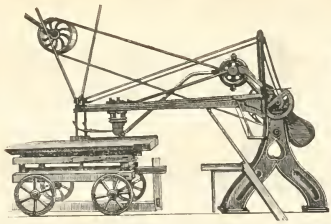
Abbott & Breed. Jos. W. Abbott commenced business in 1853 for the manufacture of ladies' and misses' boots and shoes. In 1864 Mr. Breed became a partner; they occupy a 3 story brick building 86x27, situated on State st., No. 13, and give employment to 150 persons, turning out from 7,000 to 8,000 pairs per month. They do a business of about $200,000 per annum. Office No. 95 Pearl street, Boston.

J. A. Sweetser occupies the first story of building, situated on the corner of Railroad avenue and Washington street, for the manufacture of ladies' and misses' shoes. He commenced business in 1866, and during the busy season employs from 25 to 50 hands, and produces about $35,000 worth of goods per annum.

E. T. Bubier occupies a four story brick building, 70x25, located at 78 Market street, for the manufacture of handmade ladies', misses' and children's boots and shoes. Commenced business in 1856; employs in the busy season 200 hands, producing about 2,000 cases shoes per year.

H. H. & J. T. Bailey occupy a two story building 25x20, situated at No. 26 Union street, for the manufacture of ladies' misses' and children's boots and shoes. Have 25 employees, and do a business amounting to $20,000 per annum. The business was commenced in 1868.

N. A. Nurdge, commenced the manufacturing of ladies', misses and children's boots and shoes in 1851. He occupies a three story frame building with basement 40x20, situated at No. 46 Exchange street. He employs when in full operation 50 employees, turning out 300 cases per annum. The business amounts to nearly $35,000.



P. LENNOX & CO.,
Manufacturers and Dealers in
Goat, Kid, Morocco,
PEBBLED & GLOVE CALF,
SPLIT & BUFF LEATHER,
LININGS, BINDINGS, SKIVERS, &C.
No. 2 PEARL ST. HOUSE, BOSTON,
FACTORY, 23 MARKET ST., - - LYNN, MASS.

P. Lenox & Co., commenced the manufacturing of kid, goat, morocco, pebble, glove and calf skins in 1852. Their works are situated on Market street, No. 23, where they have buildings as follows: sales room, 50x24 feet, two and a half stories, brick; tannery 34x24 feet, two and a half stories, wood; beam-house five stories, 80x30 feet, wood, wing 100x12 feet; coloring-house 48x20 feet. Employ 50 hands, producing 2,000 skins per week.

Their machinery is driven by a 45 horse-power engine built by the Putnam Machine Company, of Fitchburg, for heating the buildings, and to furnish steam for the engine they have two 25 horse-power tubular boilers, built by McKay & Aldus, of East Boston, and Hoslan, of Salem, Mass. This firm also manufacture a patent beaming machine for beaming hides and skins, which they are just introducing into the market, and which will be an invaluable article for manufacturers of this kind.

Joseph F. Hay occupies a two story frame building 60x 28, located at No. 34 Exchange street, for the manufacture of ladies', misses' and children's boots and shoes. Mr. H. commenced business in 1850. He employs 25 hands, and produces ten cases per week.

Buffum & Shelton commenced business in 1851, for the manufacture of ladies', misses' and children's boots and shoes. They occupy a two story frame building 45x24 feet, located at No. 21 Exchange street. They employ 100 hands producing 40 cases per week. Their business amounts to $75,000 per annum.

G. A. Hawley occupies a three story frame building, 55 x30 feet, situated at No. 7. Spring street. He commenced the business in 1866; manufacturing of ladies', misses' and children's boots and shoes; employs 50 hands, producing 1,000 cases per year; doing a business of $75,000 per annum. The power is furnished from an engine in building adjacent.

Nathan Breed commenced business in 1818, and is the oldest manufacturer of ladies' and misses' boots and shoes in Lynn. He occupies a three story frame building 60x22 feet, situated at No. 105 Broad street. In good times he employs 100 hands and does a business of about $90,000 per annum.

Brown & Brother. Situated at 42 Union street, in a four story granite building 100x25 feet, is the boot and shoe manufactory of Messrs. Brown & Brother, who commenced the business in 1862. This firm employs 300 persons, making nearly 4000 cases per annum; the goods of this firm are made out of the finest stock, both ladies and gents. Do a business of nearly $300,000.

George W. Law occupies a two story frame building, 40 x18, situated at No. 10 Spring street, for the manufacture of ladies', misses' and children's boots and shoes. The business was commenced in 1863, and in the busy season employs 100 persons, and produce 6000 cases per annum, the business amounting to $60,000 per year. Mr. Law commenced business in 1863.

B. Hitchings occupies the lower floor of a 3 story frame building 55x35, located at No. 5 Spring street, for the manufacture of lasts and patterns. The business was commenced in 1851. Mr. H. gives employment to 5 persons, and produces 600 lasts per week.

Swan & Fuller commenced business in 1865, to manufacture ladies' and gents' machine sewed boots and shoes. Their shop is situated at No. 8 Union street, occupying a 4 story frame building 30 x 30, employ 40 hands, turning out 30 cases per week. They also manufacture the patent American beating machine, for leveling the bottoms of boots and shoes. This machine is simple, compact and durable, weighs 500 lbs., and by its use one man can do the work of three, with the hammer, leaving the shoe in a far superior condition, and can be run either with the foot or power. This machine is valuable as a sole cutter, moulder and beater out, and has been extensively adopted by the manufacturers of Lynn.

J. Jackson occupies the first floor of a 2 story frame building, situated on Broad street. Mr. Jackson commenced business in 1841, has 8 employees, manufacturing lasts and patterns. Power furnished by engine in building adjacent.

Geo. W. Keene & Sons occupy a 4 story building 30x22, built of brick, situated No. 10 Exchange street, for the manufacture of ladies' and misses' boots and shoes. The business was commenced in 1835. They employ during busy times 300 persons, turning out 4,000 cases per annum. The motive power is furnished from a 50 horse power engine, built by the Putnam Machine Co. of Fitchbug; 3 tubular boilers 50 horse power each, built by McKay & Aldus, furnish steam for engine, also to heat the building, &c.

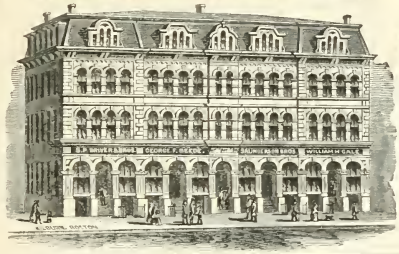
Messrs. Keene & Sons do a business of about $400,000 per annum.

Phillips & Estes commenced business in 1847, to manufacture ladies' and misses' boots and shoes; occupy a 3½ story frame building 36 x 22, situated at No. 48 Exchange street. Have, when in full operation, 50 employees, and turn out from 400 to 500 cases per year.

Lamphier Bros. commenced the manufacturing of lasts for boots and shoes, also patterns, in July, 1865, as successors of E. C. Blake. Messrs. L. Bros. occupy the second floor of a 2 story building 55 x 40, situated on Broad street; employ 6 hands.

Q. A. Towns, occupies a two story frame building 65x22, situated at No. 91 Broad street, for the manufacture of boot and shoe heels; employs 7 persons, turning out about 1,000 pairs per day. The business was commenced in 1862, and it now amounts to $50,000 per annum.

S. P. DRIVER & BROTHERS,



MANUFACTURERS OF

Ladies' Misses' and Children's

Hand and Machine Sewed

SLIPPERS, GAITERS, BUSKINS, &c.,

—AND—

GENTS' TOILETS,

LYNN, - - - - MASS.

GOODWIN & BROTHER occupy the lower floor of a 3 story frame building 50x24, situated at No. 5 Spring st. Messrs. Goodwin Bros. commenced the manufacturing of boot and shoe lasts and patterns in 1867. They employ 4 persons and do a business of $8,000 per annum.

LUCIAN NEWHALL commenced in 1853 to manufacture ladies' and gents' fine boots and shoes and slippers, occupying three floors of a four story building 50x40, situated at No. 24 Exchange street; employs 50 hands, turning out 1000 cases per annum. Mr. N. receives power to drive his sewing machines, &c., from the building adjacent.

THOMAS B. KNIGHT, successor to Thomas Carney & Co., occupies a four story wooden building 45x20 feet, located at No. 4 Exchange street, for the manufacture of ladies', misses' and children's boots and shoes. Commenced business Dec. 1st, 1868, have from 75 to 100 employees.

JAMES B. CHASE occupies a 2½ story wooden building 24x 65 feet, located at No. 38 Exchange street, for the manufacture of men's, ladies' and misses' boots and shoes. Commenced business in 1848, has 40 employees and does business to the amount of $25,000 per annum.

DARIUS BARRY occupies a three story wooden building 40 x33 feet, located on Market street, for the manufacture of kid, goat and morocco. Commenced business in 1836, has six employees, and turns out 360 skins per week. Mr. Barry is also engaged in the manufacture of currant, grape and blackberry wines; of which he has made during the year 1868, upwards of 11,000 gallons.

C. S. SWEETSER occupies the upper floor of a 2 story wooden building, located at the corner of Railroad avenue and Washington streets, for the manufacture of ladies' and misses' shoes. Commenced business in 1866, and during the busy season employs from 25 to 50 hands.

GEORGE T. WALKER & CO. occupy a wooden building 75x26 feet, located on Brown street, for the manufacture of iron castings of every description. Commenced business in 1866; have six employees and consume about 3 tons of iron per week. Run an engine of four horse power, with one tubular boiler six horse power, built by Bird & Co., of East Boston, Mass.

MOSES NORRIS & SON occupy a three story wooden building 80x30 feet, located at No. 25 Market street, for the manufacture of kid, goat and morocco, of which they turn out 500 skins per week, employing 14 hands and doing business to the amount of $50,000 per annum.

T. W. BACHELLER, occupies a three story wooden building 50x20 feet, located at No. 12 State street, for the manufacture of gents', boys', ladies' and misses' boots and shoes; commenced business in 1840; has 75 employees; turns out 600 pairs per week, and does business to the amount of upwards of $40,000 per annum.

OLIVER & SMITH occupy a two and a half story wooden building 45x23 feet, located at No. 2 State street, for the manufacture of ladies', misses' and children's boots and shoes; commenced business in 1865; have 25 employees; turn out about 4,000 pairs per month, and do a business of $100,000 per annum.

BANCROFT & PURINTON occupy a 3 story wooden building 160x35 feet, located at No. 96 South Common street, for the manufacture of ladies', misses' and children's boots and shoes. Business established in 1845, and during the busy season have 130 employees, and turn out from 125 to 150 thousand pairs per annum. Run an engine of ten horse power, built by George C. Newcomb, of Salem, Mass., with one tubular boiler, 12 horse power, built by McKay & Aldus, of East Boston, Mass. Do business of from 200 to 300 thousand dollars per annum.

C. B. INGALLS occupies a two story wooden building 36x 22 feet, located at No. 32 Union street, where they manufacture misses' and children's boots and shoes, giving employment, in good times, to 20 hands, and turning out about 15,-000 pairs per annum.

BERRY, FIELD & CO. occupy a three story wooden building 50x25 feet, located at Nos. 9 and 10 State street, for the manufacture of ladies' and misses' boots and shoes. Commenced business in 1866; have 75 employees, and turn out about 60,000 pairs, and do business of $100,000 per annum. Their machinery is driven by an engine of 100 horse power in building adjacent.

C. E. SPINNEY & SON occupy two floors of a three story wooden building 60x28 feet, located at No. 5 State street, for the manufacture of ladies' and misses' boots and shoes, employing 40 hands, and turning out 900 pairs of boots and shoes per week, doing business to the amount of $40,000 per annum.

GEORGE PECKER occupies a three story wooden building, 63x25 feet, located at No. 72 Market street, where he employs upwards of 50 hands in the manufacture of ladies', misses' and children's boots and shoes, the product of which are 3,600 pairs per week.

S. P. DRIVER & BROS. occupy a four story brick building located at No. 88 Market street, building known as "Burbier's Block." This firm commenced business in 1867, as manufacturers of ladies', misses' and children's slippers, buckskins, &c., of the finest quality. The business was established in 1835 by S. Driver, at Salem, Mass. This firm were burned out in the spring of 1869, and are not as yet permanently located.

J. F. VELLA,

MANUFACTURER OF

Ladies', Gents', Misses' and Children's

BOOTS & SHOES,

Willow Street,

(Formerly Keene's Steam Factory),

LYNN, - - - MASS.

C. S. Vittum occupies a room in building located at No. 39 Exchange street, for the manufacture of children's boots and shoes of every style and color; business commenced in 1865. Have 45 hands, and do a business of $30,000 per annum.

James Knowlton commenced the manufacturing of ladies', misses' and children's boots and shoes in 1859. He occupies a 2 story wooden building 30x20 feet, located at No. 3 Spring street; has 30 employees, and turns out 15 cases per week.

D. N. Gloyd & Co. commenced in 1866 to manufacture stiffenings, taps, heels and heel stock, occupying a 2 story wooden building 40x25 feet, located at No. 86 Broad street, employ 6 hands, turning out about 2,000 stiffenings, heels, &c. per day.

H. & N. Clark occupies a 4 story wooden building, located on Broad street, for the manufacture of kid and morocco leathers.

James N. Buffum occupies a 3 story building, located at No. 15 Broad street, for sawing, planing, and manufacturing of boxes. Have 35 employees.

J. Hennessey & Co. occupies 3 rooms in a 3 story building, located at No. 95 Broad street, for the manufacture of morocco and pebbled calf skins; commenced business of 1867. Have 5 employees; finish about 40 doz. per week.

J. W. Neal & Co. occupy a 4 story wooden building 40x20 feet, located at No. 2 Exchange street; manufacture of French style ladies' and misses' hand-made boots and shoes; business commenced in 1848. This firm do a business of nearly $100,000 per annum.

J. F. Vella occupies a four-story wooden building 30x30 feet, located on Willow street, for the manufacture of ladies', gents', misses' and children's boots and shoes. Commenced business in 1867. Employ in the busy season 125 hands, and turns out about 60,000 pairs per year, doing a business of $100,000. He has in operation two McKay machines, and twelve other machines of various kinds required in this business, which are run by an upright engine of six horse power, with a boiler of 15 horse power, built by J. C. Hobbs & Sons, West Cambridge, Mass. These goods are sold in every part of the Union.

Joseph Davis & Co. occupies a 5 story brick building, 130x22 feet, situated at No. 20 Exchange street, for the manufacture of ladies' and misses' boots and shoes. The business was commenced in 1855. Employ 300 persons, turning out 3,700 cases per annum; do a business of $40,000. Power furnished from a 40 horse engine in building adjacent.

John Mahon & Son occupy a 4 story wooden building 60x25 feet, located at No. 28 Exchange street, for the manufacture of gents', ladies' and misses' boots and shoes; commenced business in 1865; have 150 employees, turning out 650 pairs per day. Run 30 machines of different patterns; power furnished from building adjacent.

J. H. Barnes occupies the lower floor of a two story brick building 40x30 feet, situated at No. 17 Market street, where he employs six hands in the manufacture of lasts and patterns, having been engaged in the business since 1856.

Geo. H. Cushman occupies a 3 story frame building 65x25 feet, located at No. 8 Spring street, for the manufacture of paper boxes and paper soles; commenced business in 1851. Have 20 employees.

Varney Bros. commenced the manufacturing of children's boots and shoes in 1867, at No. 6 Washington street, occupying a 2 story frame building 50x30. Their shoes are made mostly by hand.

Philip A. Chase & Co. occupy a 3 story frame building 50x50, located at Nos. 9, 11, and 13 Spring street, for the manufacture of gents', ladies' and misses' boots and shoes; commenced business in 1856; have 300 employees, do a business of $300,000. Run an engine of 25 horse power, built by George L. Newcomb, for driving the machinery.

Potter & Main, occupy a three story brick building 60x80 feet, located at the corner of Beach and Suffolk streets.

They commenced the manufacturing of packing boxes in 1867. Employ 14 persons. Their machinery is driven by an engine of 25 horse power, built by Otis Tufts, of Boston, steam furnished from a tubular boiler of 40 horse power, made by Campbell, Whittier & Co., of Boston. This firm also make paper boxes for boots and shoes.

J. M. Atwell, commenced business in 1843, for the manufacture of ladies' and misses' boots and shoes. He occupies a three story building 50x20, situated at No. 30 Exchange street, employs in good times 300 hands. His business amounts to nearly $100,000 per annum.

Benjamin F. Doak, 2d, occupies a four story brick building 130x22 feet, situated at No. 16 Exchange street, for the manufacture of ladies' and misses' boots and shoes. Business commenced in 1855. Mr. Doak employs in busy times 300 persons, producing 3,700 cases per year; does a business of 400,000 per annum. The machinery is driven by a 50 horse power engine, built by Putnam Machine Co., three boilers by McKay & Aldus.

S. Oliver, Jr. & Co., boot and shoe manufacturers, commenced business January 1st, 1868. They occupy a shop located at No. 37 Washington street; employ from 250 to 300 hands in the manufacture of ladies', misses' and child-

S. D. TRIPP & CO.,

MANUFACTURERS OF

Boot & Shoe Machinery,

LEATHER CUTTERS, DIES,

AND

SEWING MACHINES.

MANUFACTORY, 13 BROAD STREET, LYNN, MASS.

Salesroom 101 Milk, and 2 Pearl street, Boston, Mass.

ren's boots and shoes, and ladies' and gents' fine slippers. They turn out about 100,000 pairs per year, worth about $150,000. The machinery used is run by an engine of 10 horse power, built by C. T. McLaughlin, of Boston, Mass., with a tubular boiler of 20 horse power, built by McKay & Aldus of East Boston, Mass. Office and salesroom, No. 80 Pearl street, Boston.

S. D. Tripp & Co. commenced business in 1864, for the manufacture of boot and shoe machinery, leather cutters or dies and sewing machines of all descriptions, occupying two floors in a 4 story wooden building 100 x 38 feet, located at No. 13 Broad street. Have 25 employees, and do business of $50,000 per annum. Their machinery, consisting of lathes, planers, drills, &c., and other machinery adapted to the business, is driven by a 60 horse power engine, in building adjacent. This firm have a sample and salesroom at No. 2 Pearl street and 101 Milk street, Boston.

John T. Moulton & Co. employs 16 hands in the manufacture of goat, kid and morocco leathers, at No. 10 Marion street, occupying a 4 story frame building. The business was commenced in 1861, and they are now doing a business of $50,000 per annum. Office and salesroom 50 Milk street, Boston.

Thos. E. Brewer commenced business in 1862 for the manufacture of misses' and children's boots and shoes, and occupies a 2 story wooden building, 30x18 feet, located at No. 103 Broad street; have, when in full operation, 50 hands. Turn out about 150 pairs per day.

P. P. Tapley & Co., manufacturers of black French morocco, kid, goat, pebbled, calf and grain leathers. The business was commenced in 1843; occupy buildings located at 89 Broad street; employ 50 hands, turning out on an average 2,400 skins per week, doing a business of $200,000 per annum. The motive power is furnished from an engine of 25 horse power, built at the Atlantic Works of East Boston; steam furnished from 1 tubular and 1 flue boilers, built by the Atlantic Works and by McKay & Aldus, of East Boston.

Amos F. Breed commenced the manufacture of ladies', misses' and children's boots and shoes in 1856, occupies a 4 story brick building, 130x22, located at No. 14 Exchange street, employs 300 persons, and produces 3,700 cases per annum. The machinery is driven by a 50 horse engine, built by the Putnam Machine Co., of Fitchburg, furnished with steam from 3 tubular boilers, built by McKay & Aldus, of East Boston.

Berry & Beede occupy a 3 story frame building, 60x20, located at No. 23 Monroe street for the manufacture of ladies', misses' and children's boots and shoes; commenced business in 1868; established by C. O. Beede in 1865. They employ 150 hands, turning out 80,000 pairs per annum.

Newhall & Welington, boot and shoe manufacturers, commenced business in March, 1866. They occupy a 5 story wooden building 50 x 70 feet, located Nos. 10, 12, and 14 Willow street, and employ about 300 hands in the manufacture of gents', ladies', misses' and children's boots and shoes, of which they turn out 250,000 pairs per year, and do a business of about $350,000.

Wm. F. Morgan, occupies a two story wooden building 25x60 feet, located at No. 13 Railroad avenue, and one floor of a three story wooden building 45x50, at the corner of Washington and Monroe streets, for the manufacture of ladies' and misses' boots and shoes. Employs 70 hands, turns out about 65,000 pairs per year, and does business amounting to about $125,000. Commenced business in 1866.

S. S. Ireson & Co. occupy a 3 story wooden building 30 x50 feet, located on Central square, opposite the depot, for the manufacture of gents', ladies', misses' and children's boots and shoes; employ about 200 hands, turn out about 100,000 pairs per year and do business amounting to about $200,000. They run 3 McKay and a large number of stitching machines. These goods are sold in all parts of thee Union. Business established in 1855.

Sanborn & Parsons, successors to Graves & Sanborn, commenced business in April, 1866. They occupy a 3 story wooden building 28 x 50 feet, located No. 67 Union street, and employ 100 hands in the manufacture of ladies', misses' and children's boots and shoes, of which they turn out about 100,000 pairs per year, worth about $125,000. They run 2 McKay machines; power is supplied by an engine of 10 horse power, built by the Wilcox Steam Engine Co., of Providence, R. I.

Graves & Co. occupy ½ of a 3 story wooden building 45 x50 feet, located No. 83 Union street, for the manufacture of ladies', misses' and children's boots and shoes; employ 75 hands, turn out 50,000 to 60,000 pairs per year, and do business amounting to about $75,000. Business established in 1866.

F. B. Mower occupies a two story wooden building 20x 60 feet, located at No. 21 Willow street, for the manufacture of ladies' and misses' boots and shoes. He commenced business in January, 1862; employs about 70 hands, and turns out about 28,000 pairs per year, worth about $35,000.

D. F. Chace & Bros. occupy three floors of a wooden building 22x60 feet, located No. 71 Union street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1864; employ from 75 to 100 hands, turn out about 50,000 pairs per year, and do business amounting to $80,000.

L. Hill occupies two floors 28x75 feet, in a 3 story wooden building 60x75 feet, located No. 66 Union street, for the manufacture of ladies' and misses' fine boots and shoes. Commenced business in 1865; employs 35 hands, and turn out 30,000 pairs per year, worth about $65,000.

Horgan & Donovan occupy a two story wooden building 18x24 feet, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1866; employ 30 hands, and turn out about 25,000 pairs per year, worth $50,000.

W. H. Kimball & Co., manufacturers of all kinds of machinery and dealers in sewing machines, commenced business in 1868; employ four hands. Their shop is located at No. 41 Washington street, and No. 41 Central avenue.

W. A. & C. H. Bacheller occupy half of a four story wooden building 50x60 feet, located No. 59 Market street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business January 1st, 1869; employ about 200 hands, and turn out about 120,000 pairs per year, worth about $100,000.

C. W. Lewis occupies a two story wooden building 20x40 feet, located on Central Square, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1857; employs 25 hands, and turns out about 40,000 pairs, worth about $50,000.

James Riley occupies one floor in a two story wooden building 24x60 feet, located on Central street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1864; employs 30 hands, and turns out about 30,000 pairs per year, worth about $40,000.

George W. Downing occupies two floors in a wooden building 18x54 feet, located No. 26 Monroe street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in June, 1863; employs 50 hands, and turns out about 40,000 pairs per year, worth about $40,000.

C. B. Stearns commenced business in 1866. He occupies 1 floor of a wooden building 20x50 feet, located No. 8 Monroe street, for the manufacture of misses' and children's boots and shoes, of which he turns out about $30,000 worth per year.

F. T. Locke occupies 1 story in a wooden building 28x 150 feet, located No. 46 Monroe street, for the manufacture of ladies' boots and shoes; commenced business in 1854; employs 25 hands and turns out about 25,000 pairs per year, worth about $25,000.

Wm. A. Kelley & Son occupy a 4 story wooden building 24x150 feet, located No. 38 Monroe street, for the manufacture of kid, goat, morocco bindings, skivers, &c. The business was established in 1852. They employ about 30 hands, and turn out about 100,000 skins per year, worth about $125,000.

Buffum & Moore occupy a 3 story wooden building 24 x62 feet, located corner of Railroad avenue and Washington streets, for the manufacture of ladies' and misses' machine made shoes. They employ about 60 hands, and turn out about 60,000 pairs per year, worth about $75,000. Commenced business in 1868.

John Shaw, 2nd, occupies 2 rooms 25x50 feet, in a three story wooden building, located at No. 85 Union street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1866. Employs 50 hands, and turns out about 50,000 pairs per year worth about $75,000.

Vennard & Osgood occupy one floor in a wooden building 23x70 feet, located on Monroe street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1862. Employ 40 hands, and turn out about 24,000 pairs per year, worth about $40,000.

P. C. Hill commenced business in 1853. He employs about 50 hands, and turns out about 60,000 pairs per year, worth about $75,000. He occupies 2 floors of a three story wooden building 26x50 feet, located at No. 6 Willow street.

C. G. Clark & Co. occupy a four story wooden building 26x124 feet, located No. 32 Monroe street, for the manufacture of goat, kid, morocco, skivers, roans, linings and bindings. They employ 25 hands, turn out about 65,000 skins per year, and do business amounting to about $115,000. Commenced business in 1851.

William Norton occupies one floor of a wooden building 22x60 feet, located No. 16 Monroe street, for the manufacture of ladies' and misses' machine-sewed boots and shoes. Employs 25 hands, and turns out about $25,000 worth.

Charles H. Trask occupies a 4 story wooden building, 22x45 feet, located No. 76 Union street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1857, employs 200 hands, turns out about 90,000 pairs per year, and does business amounting to about $100,000. The machinery is run by one of Roper's patent caloric engines, built by Able W. Tripp, of Boston, Mass.

E. H. Johnson occupies a 4 story brick building, 45x70 feet, located No. 22 Monroe street for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1853, employs about 250 hands, turns out about 200,000 pairs per year, and does business amounting to about $300,000. The machinery used in this establishment is driven by an upright engine of 24 horse power, with a tubular boiler of 25 horse power, built by S. E. Chubbuck & Sons, of Roxbury, Mass.

C. F. POLLARD,

MANUFACTURER OF

POWER, TREADLE, AND PORTABLE

GRINDSTONES.

Also, Grindstone, Greenstone and Soapstone Heel Wheels, and

HAND HEEL STONES.

NO. 6 WASHINGTON STREET, - - - LYNN, MASS.

C. F. POLLARD occupies the lower floor of a three story building 40x22, built of wood, situated at No. 6 Washington street. Mr. P. commenced the manufacture of power treadles and portable grindstones in 1868. Mr. Pollard does a business of $12,000 per annum.

H. H. HOLLIS & Co. occupy a 4 story wooden building, 24x50 feet, located No. 52 Monroe street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1867, employ 150 hands, turn out about 100,000 pairs per year, and do business to the amount of about $120,000. Formerly at No. 70 Union street.

B. F. SPINNEY occupies a 3 story wooden building 44x80 feet, located No. 77 Union street, for the manufacture of ladies' and misses' fine gaiters and Congress boots. He employs 200 hands, turns out about 200,000 pairs per year, and does business amounting to about $350,000. Runs 3 McKay and from 50 to 75 stitching machines. Power supplied by an engine in adjacent building. The business was established in December, 1858.

B. F. OLIVER occupies 2 rooms 28 x 75 feet, in a 3 story wooden building 60x75 feet, located No. 68 Union street, for the manufacture of ladies' fine gaiters and ladies' and gents' fancy slippers; commenced business in 1863; employs 60 hands, and turns out about 40,000 pairs per year, worth about $75,000.

HARRISON NEWHALL occupies a 3 story wooden building 22x60 feet, located No. 16 Monroe street, for the manufacture of ladies', misses' and children's boots, shoes and slippers. Employs 100 hands, turns out about 25,000 pairs per year, and does business to the amount of about $75,000. Business established 1840.

ALLEN STORY occupies a shop located No. 8 Monroe st., for the manufacture of ladies', misses' and children's boots and shoes. He employs 50 hands and does a business amounting to about $45,000 per year.

BETTEN BROS. occupy a 3 story wooden building 22 x 50 feet, located No. 17 Willow street, for the manufacture of ladies', misses' and children's boots and shoes. Commenced business in 1868; employ 40 hands, and turn out about 25,000 pairs per week, worth about $40,000.

HOLT & HALLOWELL occupy a 3 story wooden building 20x50 ft, located No. 31 Exchange st., for the manufacture of ladies', missees' and children's boots and shoes, for the southern and western trade. They commenced business in 1867; employ from 50 to 60 hands, and turn out about 30,000 pairs per year, worth about $50,000.

J. W. HAZELTINE occupies a two story wooden building 18x40 feet, located No. 9 Willow street, for the manufacture of gents', ladies', misses' and children's boots and shoes. Commenced business in 1863; employs 50 hands, and turns out about 1,500 pairs per week, and does business to the amount of $18,000 per year.

THOMAS MCALOON & BROS. occupy a 2½ story wooden building 20x70 feet, located No. 3 Willow street, for the manufacture of gents', ladies', misses' and children's boots and shoe. They employ about 350 hands, turn out about 200,000 pairs per year, and do business to the amount of about $200,000.

ROBERT OLIVER occupies a three story wooden building 23x70 feet, located No. 23 Washington street, for the manufacture of kid, goat and morocco. He commenced business in 1863; employs from 16 to 18 hands, and turns out about 50,000 skins per year, worth about $30,000.

L. S. BERRY occupies one floor of a two-story wooden building 22x40 feet, located No. 27 Monroe street, for the manufacture of ladies', misses' and children's boots and shoes. Commenced business in 1866. Employs 30 hands, and turns out about 20,000 pairs per year, worth about $40,000.

GEORGE SPINNEY occupies a shop No. 20 Monroe street, for the manufacture of ladies' boots. Commenced business in 1866. Employs about 45 hands, and turns out about 35,000 pairs per year.

CHARLES A. TABER, occupies a shop in a four story wooden building, located No. 5 Railroad Avenue, for the manufacture of boots and shoes. Commenced business in 1858. Employs 40 hands and turns out about 20,000 pairs per year, worth $25,000.

P. HANLEY, occupies a three story wooden building 30x50 feet, located on Railroad Avenue, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1867. Employs 25 hands and turns out about 10,000 pairs per year worth about $20,000.

BENJAMIN DORE, occupies two rooms 20x50 feet, and one room 20x25 feet, located No. 85 Union street, for the manufacture of ladies' and misses' fine machine made boots and shoes. He commenced business in 1865; employs 40 hands and turns out about 50,000 pairs per year, worth about $100,000.

E. WALDEN & Co., occupy half of a two story wooden building 45x45 feet, located Nos. 31 and 33 Washington street, for the manufacture of ladies', misses' and children's hand made boots and shoes. Commenced business in 1850. Employ 50 hands and turn out about 75,000 pairs per year, worth about $75,000.

JOHN DOUGHERTY, occupies a three story wooden building 18x36 feet, and a two story wooden building 18x23 feet, located No. 10 Willow street, for the manufacture of gents',

ALLEN & BOYDEN,

Manufacturers of

Paper Boxes

OF ALL KINDS.

NO. 9 BROAD STREET, LYNN, MASSACHUSETTS.

GEO. H. ALLEN. JOS. A. BOYDEN.

ladies', and misses' boots and shoes. He commenced business in 1856; employs about 50 hands, and turns out about 50,000 pairs per year, worth about $75,000.

NICHOLS & INGALLS, occupy a shop located No. 18 Monroe street, for the manufacture of ladies', misses' and children's boots and shoes; employ 75 hands, and do a business of upwards of $100,000 per annum.

ALLEN & BOYDEN occupy a room 65x30 feet, in a 4 story wooden building located at No. 9 Broad street, where they employ 12 hands in the manufacture of paper boxes of every description. The business was established in 1866, and succeeded by the present firm in May, 1867. This firm consume annually, from 70 to 80 tons of straw board, doing business to the amount of $18,000.

JOHN NOURSE & SONS occupy a 2 story wooden building 22x60 feet, located No. 24 Monroe street, for the manufacture of ladies', misses' and children's boots and shoes. Employ 30 hands, and do business amounting to about $50,000 per year. Commenced business in 1868.

C. H. ABORN & CO. commenced business in 1854. They occupy a 5 story wooden building 18x50 feet, located No. 6 Monroe street, for the manufacture of ladies', misses' and children's boots, Turn out about 80,000 pairs per year, giving employment to about 60 hands, and doing a business amounting to about $140,000 per annum.

JAMES PHELAN occupies a 2 story wooden building 22x47 feet, located No. 24 Monroe street, for the manufacture of ladies', misses' and children's boots and shoes. Commenced business in 1864; employs 50 hands, and turns out about 50,000 pairs per year, worth $65,000.

GEORGE W. DOWNING occupies 2 stories in a wooden building 18x45 feet, located No. 26 Monroe street, for the manufacture of ladies', misses' and children's boots, shoes and slippers; commenced business in 1863; employs 50 hands, and turns out about 40,000 pairs per year, worth $40,000.

T. P. RICHADSON & SON occupy a 5 story wooden building, located No. 12 Monroe street, for the manufacture of ladies' and gents' gaiters and slippers. They commenced business in 1843, employ 100 hands.

HAWKES & HOLMES occupy a 4 story wooden building 25 x35 feet, located No. 11 Washington street, for the manufacture of ladies', misses' and children's boots and shoes. Commenced business in 1865; employ 25 hands.

F. M. CUTCHEON occupies a shop in a 3 story wooden building, located No. 8 Monroe street, for the manufacture of gents', ladies', misses' and children's boots and shoes. Commenced business in 1863; employs 75 hands, and turns out about 40,000 pairs per year, worth about $40,000.

J. D. KASKELL & CO. occupy 1 floor in a wooden building 22x50 feet, located No. 23 Monroe street, for the manufacture of ladies' machine sewed boots and shoes. Commenced business in 1866; employ 8 hands and turn out about 10.000 pairs per year, worth about $20,000.

S. SARGENT & SON, occupy two floors of a three story wooden building 21x60 feet, located on Central Avenue, for the manufacture of paper boxes. They commenced business in 1856; employ 12 hands; consume about 40 tons of straw board per year, and turn out about 2,400 boxes per week.

MOWER & BROTHER, occupy a two story wooden building 20x40 feet, located No. 2 Central Avenue, for the manufacture of ladies' and misses' boots and shoes. They commenced business in 1857: employ 50 hands and turn out about 50,000 pairs per year, worth about $75,000.

JAMES J. GROVER, occupies a wooden building 24x50 feet, located No. 19 Monroe street, for the manufacture of ladies' fine boots and shoes. He commenced business in 1866; employs 30 hands, and turns out about 30,000 pairs per year, worth about $60,000.

J. B. JOHNSON & SONS, occupy a three story wooden building, located No. 17 Monroe street, for the manufacture of ladies', misses' and children's boots and shoes; commenced business in 1856; employ 75 hands and turn out about 30,000 pairs per year, worth about $35,000.

LEWIS & COLLYER, occupy a four story wooden building 22x50 feet, located No. 73 Union street, for the manufacture of ladies' and misses' boots and shoes. They employ about 125 hands, and turn out about 75,000 pairs per year, worth about $85,000. They run an engine of 10 horse power, built by the Wilcox Caloric and Steam Engine Co., of Providence, R. I. Commenced business in 1858.

C. B. TEBBETTS occupies a three story wooden building 20 x60 feet, located at No. 69 Union street, for the manufacture of ladies', misses' and children's boots, shoes and slippers. Commenced business in 1864; employs 150 hands, and turns out about 100,000 pairs per year, worth about $125,000.

S. M. BUBIER, manufacturer of ladies' and misses' boots and shoes, occupies a 4 story wooden building, located at No. 65 Market street. The main building is 60 feet long by 25 wide, to which has been added a wooden building 4 sto-

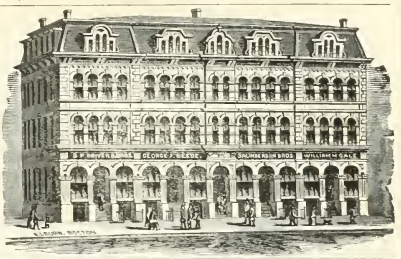
WILLIAM H. GALE,

MANUFACTURER OF

Ladies', Misses' and Children's Fine

Boots and Shoes,

LYNN, - - MASS.



William H. Gale. I. G. Sutherland.

ries high, 40x50 feet. The engine and boiler house, which has been built within the last year, is of faced brick, 2 stories high and 45x35 feet. The whole establishment, covering an area of 6,075 square feet. The business, which was established in 1840, has increased from year to year, and, at the present time, is the largest boot and shoe manufactory in Lynn, giving employment to from 400 to 500 hands, in the busy season, and turns out about 400,000 pairs per year, doing business of $600,000. The machinery, which consists of 3 McKay machines, with a full compliment of others required in the business, is run by an engine of 40 horse power, built by the Putnam Machine Co., of Fitchburg, Mass., with two tubular boilers of 40 horse power each, built by the same company, which also supply steam to several buildings in the vicinity.

COLLINS & DELNOW occupy a 2½ story wooden building 60x30 feet, and a 3 story wooden building 46x30 feet, located at No. 27 Monroe street, for the manufacture of paper boxes, paper soles, shankings, linings and stayings. Commenced business July 1st, 1868; employ 20 hands, consuming 100 tons of straw and leather board per annum, turn out 50,000 boxes, and do business amounting to about $60,000.

G. W. MASSEY occupies two floors of a three story wooden building 18x40 feet, located No. 15 Willow street, for the manufacture of misses' and children's boots and shoes. Commenced business in 1847; employs 25 hands, and turns out about 10,000 pairs per year, worth about $15,000.

R. M. COFFEE & Co. occupy a 2½ story wooden building 50x25 feet, located in the rear of 24 Washington street, for the finishing of kid, goat and morocco. Commenced business in October, 1866; employ 10 hands, turn out 50,000 skins per annum, and do business to the amount of $10,000.

E. J. MEDBURY occupies ½ of a 4 story brick building 50 x80 feet, located at No. 22 Washington street for the manufacture of ladies', gents', misses' and children's boots and shoes. Commenced business in 1860; employs about 60 hands, turns out about 75,000 pairs per annum, and does business to the amount of $100,000.

JAMES GRAVES & Co., occupy a two story wooden building 20x32 feet, located at No. 8 Washington street, for the manufacture of ladies', misses' and children's boots, shoes and slippers; commenced business in 1866; employ 30 hands; turn out 20,000 pairs per year, and do business amounting to about $35,000.

J. WOOLDREDGE & Co. occupy a four story brick building 50x60 feet, at No. 5 Mount Vernon street, for the manufacture of ladies', misses' and children's boots and shoes. The business was commenced in 1842; employ 600 hands, turn out 500 pairs per day. Machinery is driven by a steam engine of 60 horse power, built by the Atlantic Works, of East Boston, with two tubular boilers built by Allen & Endicott, of Cambridgeport, Mass. Also, one flue boiler, built by Allen & Endicott. They have in use 3 McKay machines, and 35 stitching machines, made by different parties. Do business amounting to $300,000 per year.

WILLIAM H. GALE, formerly occupied a store 70x25 feet, in a four story brick building, in Babier's block, and located at Nos. 102 and 104 Market street, which was burned down in the spring of 1869, and is not yet permanently located; for the manufacture of ladies', misses and children's fine boots and shoes. Mr. Gale has been engaged in the manufacture of boots and shoes since 1860, and now ships his goods to all parts of New England and the west.

INGALLS & BURRILL, occupy a three story wooden building 20x40 feet, located at the corner of Washington and Monroe streets, for the manufacture of ladies', misses' and children's machine and hand made boots and shoes; commenced business in 1866, employ 50 hands in the busy season; turn out about 50,000 pairs per year, and do business to the amount of $65,000.

WM. F. SPINNEY, occupies one-half of a four story brick building, 50x80 feet, located at No. 24 Washington street, for the manufacture of ladies' and misses' boots and shoes; commenced business in 1856; employs 75 hands; turns out about 120,000 pairs per annum, and the business amounting to $175,000.

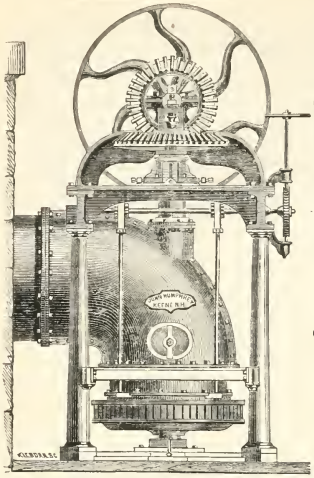
BLACK, BOWDOIN & MERRILL, occupy half of a four story wooden building, 40x50 feet, located at No. 63 Market street, for the manufacture of ladies', gents' and misses' boots and shoes; commenced business in 1866; employ 50 hands, turn out 75,000 pairs per year, and do business to the amount of $150,000.

A. M. & J. H. PREBLE occupy a three story wooden building, located at No. 12 Washington street, for the manufacture of ladies', misses' and children's boots and shoes; commenced business in May, 1863; employ 25 hands; turn out 25,000 pairs per year, and business amounting to $75,000.

W. F. BREED, DOLE & Co., manufacturers of ladies', misses' and children's boots and shoes, occupy a five story brick building 50x60 feet, at No. 6 Mount Vernon street. Commenced business in 1866; employ 150 hands, turn out from 600 to 1,000 per day, and do business amounting to $200,000.

E. STRAW occupies a two story wooden building 65x30 ft, located at No. 10 Mount Vernon street, for the manufacture of packing boxes. Commenced business in 1860; employs 10 hands, turns out 250 boxes per day, consumes 1,000,000 feet of lumber and 250 kegs of nails per year, and does business amounting to $36,000.

JAMES P. NEWHALL, occupies two floors of a wood building 25x65 feet, at 29 Exchange street, for the manufacture of ladies', misses' and children's boots and shoes. Com-



IMPROVED

FOURNEYRON

TURBINE WATER WHEEL.

Adapted for use in situations where it is desired to obtain a uniform and steady power, with the greatest possible economy of water.

Giving the highest per cent. of useful effect from the water applied, of any wheel known, and proved by practical use as one of the most efficient and reliable motors ever invented.

MANUFACTURED BY

JOHN HUMPHREY & CO.,

Engineers and Machinists,

KEENE, - New Hampshire.

(See pages 95, 143 and 243.)

menced business in 1843; employs 100 hands; turns out 60,000 pairs per year, and does business amounting to $75,000.

D. Flagg & Co., manufacture ladies', misses' and children's carpet shoes of all colors. Occupy a wooden building 52x40 feet, at Main corner of South street, where they employ 10 hands and turn out 700 pairs shoes per week.

Samuel Boyce, occupies a two story brick building 25x50 feet, located at No. 100 Broad street. The business was commenced in 1824 for the manufacture of ladies', misses' and children's boots and shoes, which gives employment to 200 hands, who turns out 60,000 pairs of boots and shoes per year, and does a business of $30,000 per annum.

N. Berry & Sons occupy a four story wooden building 80x60 feet, for the manufacture of coffee, cream tartar and drugs. Commenced business in 1825; employ 30 hands, run a water wheel, 48 feet, with six run of stone, four roasters, turn out one ton of spice per day, and one ton of cream tartar per week. Do a business of $200,000 per annum.

C. F. Coffin under the name of M. C. Pratt, occupies a four story brick building 70x30 feet, and a two story brick building 50x25 feet, located at 98 Broad street. The business was commenced in 1813, for the manufacture of gents' and ladies' sewed boots and shoes, for which they employ 150 hands, and turn out 4,500 cases of boots and shoes per year; their machines consisting of four of McKays and 30 others of different make, are driven by a steam engine of 20 horse power, with one tubular boiler, built by Putnam Machine Company, of Fitchburg, Mass. Do a business of $275,000 per year.

Beede & Tebbetts occupy a brick building located at 45 Exchange street, for the manufacture of ladies' fine boots and shoes.

A. T. Goodwin occupies 2 floors of a 2 story wood building, 56x30 feet, located at No. 2 Mount Vernon street, where he employs 13 hands for the manufacture of lasts and patterns. The business was commenced in 1828, and they now turn out 400 pairs of lasts, and consume 800 blocks per day. The works are driven by an engine of 20 horse power, built by Newcomb, of Salem, Mass., with 1 flue boiler.

C. W. Chase occupies 1 floor of a wooden building, 18x60 feet, located on Exchange street, employing 50 hands for the manufacture of ladies', misses' and children's boots and shoes. The business was commenced in 1843, now turns out 2,500 pairs of boots and shoes per year.

E. T. Jones occupies a two story wooden building 15x40 feet, located at 47 Exchange street. The business was commenced in 1862, and employ 25 hands for the manufacture of ladies', misses' and children's boots and shoes; turns out 600 pairs of boots and shoes per week, and does business of $30,000.

B. Dupar & Co. occupy a building 50x40 feet, located at 35 Exchange street, where they employ 100 hands, for the manufacture of ladies', misses' and children's boots and shoes. The business was commenced in 1864. This firm run one McKay machine and 21 stitching machines, made by different parties, and turn out 100 cases of boots and shoes per month, and do a business of $110,000 annually.

Brown, Fey & Co. occupy a 3 story wooden building 22 x72 feet, located at 33 Exchange street, where they employ 150 to 200 hands for the manufacture of gents', ladies' and misses' boots and shoes. The business was commenced in 1863. They now turn out 65 cases of boots and shoes per week. Their machinery, consisting of 2 McKay machines and 16 stitching machines, is driven by a 60 horse power engine in building adjacent.

E. C. Wells occupies lower floor of a three story wooden building 20x50 ft., located at No. 1 Breed's block, Exchange street, where he employs 50 hands, for the manufacture of ladies', misses' and children's boots and shoes. The business was commenced in 1868; and turns out 1,000 pairs of boots and shoes per week, and does a business of $50,000 per annum.

CHARLES D. PECKER occupies a 5 story brick building 21x 60 feet, located at 38 Union street, where he employs 250 hands for the manufacture of ladies' and misses' boots and shoes, of which he turns out 1,800 cases per year. The business was commenced in 1863. The machinery, consisting of 1 of McKay's machines and 15 stitching machines, is driven by an engine of 40 horse power in building adjacent; does a business of $200,000 per annum.

THOMAS STACY & CO., occupy two wooden buildings, each three stories, 35x65 feet, located at 31 Exchange street, where they employ 140 hands for the manufacture of ladies', gents' and boys' carpet and opera slippers, all kinds of leather and plush slippers; also, gents' congress gaiters. The business was commenced in 1858, by Mr. Stacy; the present firm commencing in 1864; their machinery consisting of three McKay machines and twenty stitching machines, made by different parties, are driven by an engine of 60 horse power in a building adjacent. This firm do a business of $200,000 per annum.

E. M. FARNSWORTH occupies three floors of a four story brick building, 60x30 feet, located at 25 Exchange street, where he employs 50 hands for the manufacture of leather board and straw board. The business was commenced in 1855. Machinery is driven by an engine of 60 horse power in building adjacent. Mr. F. does a business of $25,000 per year.

JEROME INGALLS, occupies a three and a half story brick building 50x65 feet, located at 23 Exchange street, where he employs 700 to 800 hands for the manufacture of ladies' and misses' gaiter boots. The business was commenced in 1862; the machinery is driven by an engine of 60 horse power in building adjacent. This shop turns out 300 cases per month, and does a business of $300,000 per annum.

LYNNFIELD CENTRE, 13 miles from Boston and 27 from Newburyport; a small village on the Newburyport Railroad, containing about 200 inhabitants and 2 church societies, located in the town of Lynnfield, which was incorporated in 1782. The surface of this town is uneven and the soil fair.

J. F. SAWTELL occupies a two story wooden building 24x 26 feet, with an ell 20x22 feet, located near the depot, for the manufacture of ladies', misses' and children's boots and shoe; the business was commenced in 1869. Employs 25 hands, turns out 50 cases per year, (60 pairs per case,) and does a business of $50,000 per annum.

ELBRIDGE GERRY occupies a two story wooden building 40x50, located three-quarters of a mile from the station, for the manufacture of barberry root for tanning and dyeing purposes. Commenced business in 1865. Employs 4 hands.

MACE'S, 3 miles from Lowell, and 10 from North Lawrence, a flag station, on the Lowell and Lawrence Railroad.

MACHINE SHOP, a country station on the Lawrence Branch.

MALDEN, 5 miles from Boston, and 21 from Lawrence, a station and town on the Boston & Maine and Eastern Railroads. The town has a population of 7,563, and consists of 3 villages, viz., South and East Malden and Malden Centre. This town was first settled in 1648, and incorporated 1649.

BARRET & BROTHER occupy a 3 story brick building, 175x40 feet, with an L, 150x40 feet, located on Barret street, for the dye business. The business was commenced in 1803 by Wm. Barret, under present firm in 1834. Employ from 75 to 100 hands. The machinery is driven by a steam engine of 15 horse power, built by Campbell, Whittier & Co., of Boston, with 1 flue boiler, 30 feet long, 3½ feet diameter, built by Otis Tufts, of Boston; also one breast water wheel, 15 feet length, 12 feet diameter.

CHAS. M. SPOONER & CO. manufacture black varnishes, japans, and rooting paint, occupy 1 acre of land, where they employ 3 hands. Commenced business in 1865. They turn out 50 bbls. varnish per week, and 10 bbls. of roofing paint per month. Do business amounting to $30,000 per annum. Office and salesroom 105 Fulton street, Boston, Mass.

MALDEN CENTRE, 4 miles from Boston and 8 from Lynn, a village in the town of Malden, on the Saugus branch of the Eastern Railroad, containing 6 churches, viz.: 2 Orthodox, 1 Baptist, 2 Episcopal and 1 Universalist. There is located here the United States Nitre Storehouse or Arsenal, occupying 40 acres. There are 1,048 children attending school, 1,284 voters and a population of 5,070.

H. & J. S. FISHER occupy a 2 story wooden building 30 x30 feet, on Haskins street, for the manufacture of curried leather. Commenced business in 1855; employ 5 hands, run a steam engine 5 horse power, with 1 flue boiler. They curry 250 skins per week, and do business amounting to $40,000 per annum.

WEBSTER & CO. occupy buildings as follows: a wooden building, 3 stories, 40x110 feet; a brick building, 2 stories, 100 x 33 feet; stuffing shop, 2 stories, 50 x 36 feet; leach house, 1 story, 40 x 60 feet; beam house, 30 x 80 feet; hide house, 52x20 feet; tan house, 100x70 feet; scouring house, 70x20 feet; tan shed, 40x80 feet; bark house, 40x80 feet; located on Webster street, for the manufacture of boot, enamcled, cavalry and patent leather, and patent skivers, made from sheep skins. Commenced business in 1840; employ 130 hands. Their machinery is driven by a steam engine 45 horse power, built by Wm. Adams, of Boston, Mass., with 2 cylinder and 1 tubular boilers, 100 horse power combined, built by John Lally, of South Boston. They consume 3,000 cords of hemlock and 10 tons of Gambrier bark per year, and have the capacity for tanning 600 hides per week.

O. C. PERRIN & CO. occupy a brick building, 3 stories, 40 x60 feet; split shop, 3 stories, 30 x 60 feet; bleach shop, 2 stories, wood, 30x40 feet; store house, 3 stories, 40x50 feet, which are located on Ferry corner of Main streets, for the manufacture of palm leaf goods. Commenced business in 1860; employ 150 hands, when running. Their machinery is driven by a steam engine 10 horse power, built by Chubbuck & Son, of Boston, with 1 tubular boiler 15 horse power, built by Davis, of New Hampshire. They turn out 500 cases, (72 pairs per case) of Shaker goods, and 6,000 yards of bands and binds per month; do business of $100,000 per annum.

GEORGE T. COX occupies a wooden building, four stories 60x30 feet; dry-house 75x20 feet; store-house, two stories 75x20 feet, located on Pleasant street, for the manufacture of lasts and boot trees. The business was established in 1818, by Samuel Cox; under present owner in 1859. Employ 25 hands. The machinery is driven by an engine of 25 horse power, built by Bisbee & Endicott, of East Boston; with one

flue boiler. He turns out 800 pairs of lasts, and 60 pairs of boot-trees per week; consume 100,000 blocks per year, and do business amounting to $30,000 per annum.

The Boston Rubber Shoe Co. manufacture rubber boots and shoes, occupy a brick building, three stories 40x 290 feet, with an L 60x75 feet; also, a wooden building three stories 100x50 feet; boiler-house 50x70 feet; engine-room 20x50 feet, located on Webster street. They give employment to 400 hands. The machinery is driven by an engine that weighs 62 tons, of 300 horse power, with a driving wheel that weighs 60,000 pounds, built by the Corliss Steam Engine Co., of Providence, R. I., with six boilers 360 horse power combined, built by Harrison, of Philadelphia. They turn out 70,000 pairs of boots and shoes per month.

C. F. Sufferman manufactures carriage and upholstery trimmings, occupies a wooden building 3 stories 40x80 feet, another wooden building, two stories 30x40 feet, located on Ferry street. Commenced business in 1838; employs 40 hands; turns out 30 to 40 dozen shade tassels per day.

M. H. Malsh, occupies a three story wooden building, 50x30 feet, located on Haskin street, for the enrrying of leather. Commenced business in May, 1868.

Manchester, 25 miles from Boston and 10 from Salem. A village (of 1,800 inhabitants devoted exclusively to the manufacture of furniture) and town on the Beverly branch of the Eastern Railroad. It was taken from Salem in 1645. Manchester is a rocky, rough township.

This town was settled in 1636, and incorporated in 1645. It has one hotel, one town house, containing a hall, offices, and two school rooms, and six other school houses. There are three churches, two of which are Orthodox Congregational, one Baptist. There are also one chapel and one almshouse. There is no bank in the town. The rate of taxation last year, 1868, was $11.05 on $1000. Valuation of real estate, $669,926; of personal property $324,536. Total valuation $994,462. Amount exempt by law and not able to contribute, $9,524. The amount on which taxes were assessed, $984,938. Number of polls, 436. Population in 1865, was 1,643. Number of houses in 1868, 301. The number of children that attend school, 341.

Rust & Marshall occupy two 3 story wooden buildings 30x60 feet, and $30x50 ft, respectively, located on Central street, where they employ 30 hands in the manufacture of cabinet furniture, of which they make $20,000 worth per year. They commenced business in 1858. Their machinery is run by water power.

H. A. Johnson occupies a two story wooden building 38x 40 feet, located in the rear of North street, for the manufacture of cabinet furniture. Employs five hands, and turns out $6,000 worth per year. Commenced business in 1864.

A. S. & G. W. Jewett commenced the manufacture of chamber furniture in 1868. They occupy a three story wooden building 30x60 feet, located in the rear of Central street, and give employment to three hands.

Wm. Decker, manufacturer of cabinet furniture, commenced business in 1859. He occupies a two story wooden building located on School street, where he employs 10 hands and turns out $8,000 worth of furniture per year.

Leach, Annable & Co., manufacturers of furniture; established in 1844, by J. Danforth, and the firm was known as J. Danforth & Co., till 1854, when they were succeeded by the present firm. Their manufactory which consists of mill and workshop, measures as follows: mill is 40x28 feet, 3 stories high and the workshop is 36x24 feet, two stories high; furniture and finishing shop is 40x24 feet, two stories and basement; lumber shop 46x40 feet, two stories; dry house 18x12 feet and two stories high. They employ 30 hands and produce from $30,000 to $40,000 worth of first class furniture yearly. A steam engine of 15 horse power furnishes the motive power. They consume 75,000 feet of lumber annually.

Wm. E. Wheaton, manufacturer of mahogany and black walnut parlor furniture. He occupies a two story wooden building located on North street. Employs 12 hands, and does a business to the amount of $15,000 or $20,000 per annum.

Mansfield, 24 miles from Boston, 208 from New York, 19½ from Providence, 11 from Taunton and 31 from New Bedford, on the Boston & Providence Railroad. At this station is the junction of the Taunton Branch, connecting with the Taunton & New Bedford Railroad at the former place. A small village is near the station. The *town* of Mansfield is situated in Bristol county, and is traversed by the Cocasset, Rumford and Canoe rivers, which afford much water power. An anthracite coal mine was formerly worked here. Population of the town 2,300.

F. W. Cabot commenced the manufacture of coffin trimmings in 1858. His manufactory is 1½ miles from the depot. The main building is 60 x 30 feet, 3 stories, wood; another, 30x25, 1 story. Employs 25 persons and does a business amounting to $40,000 per year. He uses 9 tons of brass and 2 tons of lead annually. A 20 horse power iron wheel supplies the power, the fall here being 11½ feet, on the Rumford river.

Kingman & Hodges, manufacturers of imitation rubber, gold and plated jewelry, ornaments, combs, &c., occupy a building 30x26, 3 stories, and L 20x14, 2 stories, commencing here in 1863. They employ 50 persons, and do business amounting to $50,000 per annum. They have recently added a new branch to their business—manufacturing shoe and pegging awls,—employing 10 persons. An 18 horse power engine supplies the power. F. G. Hodges. H. W. Kingman.

Capron & Co. manufacturers of horn jewelry, employ 50 persons, commencing in July, 1868. Office, 299 Broadway, New York.

Moran & Fulton occupy 2 two story buildings for the manufacture of shoe knives and peg awls. Employ 20 persons, use 15 tons of steel per year, and produce $30,000 worth of goods. The manufactory is located on the Rumford river, from which is obtained the water that supplies the power, the fall is 14 feet.

Merritt & Draper manufacturers of gold, silver and plated jewelry, book clasps, &c. They occupy a building 85x32, 2 stories and basement, commencing here in July, 1867. They established the business at Attleboro' in 1856. They employ 50 persons and do a business amounting to $50,000 per year. Office in New York, 12 Maiden Lane.

Rogers, Comey & Co. commenced the manufacture of straw hats and bonnets in 1865, as successors to John Rogers, who established the business many years ago, the main building is 80x40, 3 stories, wood, located ¾ mile from the depot. They employ 75 persons in their works, besides 800 persons in families in the country adjacent. Office in New York, 79 White street.

Howard Perkins occupies a small shop for the manufacture of patent machines for twisting fish lines. Mr. P. was just making arrangements for quite an extensive business at the time our agent called on him, having recently taken possession of his manufactory.

J. & R. Murphey manufacture shears, scissors and skates near the depot, commencing here in 1863. Employ 10 persons and do a business amounting to $8,000 per year.

MAPLE GROVE, 14 miles from Pittsfield and 6 from North Adams, a manufacturing village of about 600 inhabitants, on the Hoosack river, in the town of Adams and on the Pittsfield and North Adams Railroad.

B. F. Phillips & Co. This firm commenced the manufacture of fancy cassimeres in 1868, as successors of Blackinton & Phillips, who established it in 1863. Their main mill building is 140x50, 3 stories, wing 36x60, 2 stories, dye house 60x30, 1 story, picker house 24x36, 2 stories, built of stone, store house 50x36, 3 stories, wood, boiler house 20x30 1 story, containing 3 boilers, built by Campbell, Whitter & Co., 2 tubular and 1 flue. Their engine is a 60 horse power of Wm. D. Andrews' pattern, New York. This company run 7 set woolen machinery, using about 1,000 lbs. wool per day, turning out 16,000 yards cloth per month. Employ 160 hands. Their motive power principally is furnished by a turbine wheel 4 feet diameter with 16½ feet fall.

"Arnoldville Mill," O. Arnold & Co., manufacturers of 56x60 print cloths, run 100 looms, 3,792 spindles, in a building 120x42, 3 stories, employ 81 hands, and turn out 24,000 yards per week. The motive power is furnished by a 50 horse overshot wheel.

Messrs. Adams Brothers & Co. commenced business in 1856, for the manufacture of cotton warp. The business was established by W. Adams & Co., about 1845. This firm employ 100 hands, running 52 looms and 2,192 spindles, making 32,000 yards 1,800 end warp, No. 18 yarn, consuming about 5,400 pounds of cotton. Their motive power is furnished by a 60 horse power turbine wheel, and a 30 horse steam engine, built by Boyden. The boilers are two tubular boilers, made by Campbell, Whitter & Co.

MAPLEWOOD, 7 miles from Lynn and 6 from Boston. A village on the Saugus Branch of the Eastern Railroad.

MARBLEHEAD. The town of Marblehead, which was formerly a part of Lynn, is situated on Massachusetts Bay, at the terminus of the Marblehead branch of the Eastern Railroad, 14 miles N. E. from Boston by the turnpike road and 20 by the railroad. It covers an area of 3,600 acres; was founded in 1628, and was incorporated a town in 1649. The present population is about 8,000; the number of voters is about 1,600. There are 8 churches, viz.: 2 Congregational, 1 Episcopal, 1 Unitarian, 1 Universalist, 1 Baptist, 1 Methodist and 1 Catholic; 18 schools, as follows: 1 High, 1 Male Grammar, 2 Female Grammar, 3 Intermediate, 10 Primary and 1 Farm School; the number of children attending school is 1,200. There are also 2 banks; the Marblehead National Bank and the Grand National Bank.

Previous to the breaking out of the Revolutionary war, Marblehead was the second town in New England in wealth, population and commercial enterprise. At the first call of the Colonial congress, this town sent to the field a complete regiment, officered and equipped for service. It was this regiment, under Brigadier Gen. John Glover, a native of Marblehead, that undertook and succeeded in safely conducting the army of Washington across the Delaware river on the night of the 25th of December, 1776. This regiment was peculiarly adapted to this work, being composed principally of sailors and fishermen. For their gallant services on that memorable night they had the honor of leading the advance on Trenton, and added much to the glory of the American forces by capturing there a thousand Hessians. At the close of the war the survivors and citizens found themselves with a ruined commerce and over 500 widows and 1,000 fatherless children. But this did not dishearten them, for when war was again declared against Great Britain in 1812, another thousand men was sent forth to vindicate their country's honor, and when the strife was over, more than 500 men, natives of this town, were found captives in Dartmoor prison alone. Still later, when the Great Rebellion broke out, this loyal little town maintained its patriotic record, being the first to respond to Governor Andrew's call for volunteers. Marblehead is also noted as the birth place of Elbridge Gerry, one of the Signers of the Declaration of Independence, Vice President of the United States, Minister to France, &c. Also, of Judge Story, formerly of the United States Supreme Court. The principal business of the place is fishing and the manufacture of boots and shoes.

MANUFACTURERS.

Samuel Shurhawk occupies a three story wooden building 40x40 feet, located at No. 84 Washington street, for the manufacture of misses' and children's boots and shoes. Commenced business in 1838; employ about 125 hands, turn out about 175,000 pairs per year, and do business to the amount of $100,000.

Henry A. Martin occupies one floor of a 2 story wooden building 30x50 feet, located at No. 83 Washington street, for the manufacture of misses' and children's fine boots and shoes. He commenced business in 1866; employs 30 hands and turns out about 300 cases per year, worth about 20,000 dollars.

S. H. Cole occupies a two story wooden building 18x24 feet, located on Waldron street, for the manufacture of children's shoes. Employs 36 hands. Commenced business in 1867.

R. F. Graves occupies one floor of a two story wooden building 14x29 feet, located on South street, for the manufacture of children's shoes. Employs from 30 to 40 hands, and turns out about 60,000 pairs per year, worth about $45,000. Commenced business in 1867.

S. H. Graves occupies one floor of a two story wooden building 14x29 feet, located on South street, for the manufacture of children's shoes. Employs from 30 to 40 hands, and turns about 60,000 pairs per year, worth about $45,000. Commenced business in 1865.

T. B. Lefavour occupies 1 floor of a 3 story brick building 20x38 feet, located No. 5 Hooper street, where he employs about 40 hands, turns out about 800 pairs per week and does business to the amount of about $14,000 per year. Business established in 1853.

H. A. Lefavour, manufacturer of children's shoes, commenced business in 1857. He occupies a 2 story wooden building 26x40 feet, with an ell 15x20 feet, located on Pleasant street. Employs about 60 hands, turns out about 2,000 pairs per week and does business to the amount of about $40,000 per year.

Rufus Lefavour occupies a 4 story wooden building 30x50 feet, located on Pleasant street, for the manufacture of children's shoes. He employs about 200 hands, turns out about 300,000 pairs per year, worth about $150,000. Commenced business in 1855.

J. Lefavour occupies a 2½ story wooden building 16x20 feet, located on Pleasant street, for the manufacture of chil-

dren's shoes of which he turns out about 1,500 pairs per week; giving employment to about 30 hands and doing business to the amount of about $30,000 per year. Business established in 1853.

Philip Lefavour occupies a 3 story wooden building 20x18 feet, located No. 17 Sewell street for the manufacture of children's shoes. He commenced business in 1848; gives employment to 30 hands, turning out about 1,000 pairs per week, and does a business amounting to about $24,000 per year.

John Quiner, Jr. occupies 1 floor of a 2 story wooden building 19x45 feet, located No. 2 South street for the manufacture of children's shoes; commenced business in 1862; employs 30 hands, turns out about 40,000 pairs per year, worth about $15,000.

W. C. Lefavour commenced the manufacture of children's shoes in the year 1853. He occupies a 2 story wooden building on Spring street, and gives employment to about 50 hands.

Davis & Tucker occupy a 3 story wooden building 40x40 feet and a 2 story wooden building 16x32 feet; located No. 32 State street for the manufacture of children's shoes. They commenced business in 1867; employ 100 hands, turn out about 2,500 pairs per week, and do business amounting to about $50,000 per year.

F. W. & I. W. Monroe occupy half of a 3 story wooden building 36x48 feet; located on Pleasant street for the manufacture of misses' and children's boots and shoes. They commenced business in 1865; employing about 200 hands, and turning out about 100,000 pairs per year.

M. J. Doak & Co. occupy a 3 story wooden building 20x36 feet; located on Pleasant street for the manufacture of children's shoes; commenced business in 1865; employ 100 hands, and turn out about $80,000 per year.

A. W. Bryer occupies a 2 story wooden building 25x60 feet; located No. 146 Washington street for the manufacture of children's shoes, of which he turns out about $40,000 worth per year. Commenced business in 1865.

Jonathan Brown occupies a 3 story wooden building 40 x60 feet, located on Pleasant street, for the manufacture of children's shoes. Employs 140 hands. Commenced business in 1843.

T. H. Armstrong occupies half of a 4 story wooden building 40x40 feet, located on Pleasant street, for the manufacture of misses' and children's boots and shoes. Employs 100 hands and turns out about 150,000 pairs per year, worth about $400,000. Business established in 1864. These goods are manufactured for, and sold by C. A. Terry, No. 69 Pearl street, Boston, Mass.

T. L. Bassett occupies a 3 story wooden building 26x40 feet, located on Pleasant street, for the manufacture of children's boots. He commenced business in 1868. Employs 50 hands, turns out about 1,000 pairs per week and does business to the amount of about $60,000 per year.

M. H. Reynolds occupies a 3 story wooden building 16x 28 feet, with an L 12x20 feet, located No. 128 Pleasant street, for the manufacture of children's machine and hand made shoes. He commenced business in 1844; employs 20 hands, turns out from 500 to 600 pairs per week and does business amounting to about $16,000 per year.

Wm. Stevens occupies a 2 story wooden building 25x40 feet, located on Sewell street, for the manufacture of children's shoes; employs 50 hands and does business to the amount of about $30,000 per year; commenced business in 1863.

John Ware commenced the manufacture of children's shoes in 1865. He occupies a three story wooden building, 28x35 feet, located on Sewell street. Commenced business in 1865; employs about 75 hands, turns out about 1,800 pairs per week, and does business to the amount of about $60,000 per year.

Orne & Merritt occupy a three story wooden building, 22x45 feet, with an ell 18x25 feet, located at No. 33 Pleasant street, for the manufacture of children's fine shoes. They commenced business in 1863. Employ 60 hands, turn out about 75,000 pairs per year, and do business amounting to about $60,000.

Thomas L. Spinney occupies one floor of a 2 story wooden building 20x100 feet, located corner Washington and Summer streets, for the manufacture of children's shoes. Commenced business in 1868; employs 20 hands and turns out about 150,000 pairs per year, worth about $60,000.

E. V. Bartlett & Co. occupy half of a four story wooden building 40x40 feet, located on Pleasant street, for the manufacture of children's shoes, for the New England and Western trade. They employ about 50 hands and turn out about 100,000 per year, worth about $50,000. Business established in 1855.

Thomas Proctor occupies a two story wooden building 16x30 feet, located on Sewell street, for the manufacture of children's shoes. Commenced business in 1865. Employs 50 hands, and turns out about 500 cases of shoes per year.

John C. Peach occupies a 1 story wooden building 18x 30 feet, located on Elm street, for the manufacture of children's shoes, of which he turns out about $9,000 worth per year, giving employment to about 20 hands. The business was commenced in 1859.

C. Prentice, 3d, occupies a 2 story wooden building 18 x30 feet, located on Franklin street, for the manufacture of children's shoes. He commenced business in 1867; employs 30 hands, and turns out about 25,000 pairs per year, worth about $15,000.

Litchman & Bartlett occupy a 2 story wooden building 24x28 feet, located on Front street, for the manufacture of misses' and children's boots and shoes. They commenced business in 1859; employ 100 hands, and turn out about 75,000 pairs per year, worth about $30,000.

George Warren occupies a 3 story wooden building 22x 24 feet, located on Lee street, for the manufacture of children's shoes. He employs 50 hands, turns out about 1,000 pairs per week, and does business amounting to about $50,000 per year. Commenced business in 1862.

Humphry Bros. occupy a 3 story wooden building 40x60 feet, located on Front street for the manufacture of misses' and children's boots and shoes. They commeneed business in 1868; employ 100 hands, turns out 2,500 pairs per week and do business amounting to about $50,000 per year.

Samuel E. Crowell occupies a 1 story wooden building, located on Front street for the manufacture of children's shoes. He commenced business in 1868 and employs about 20 hands.

William H. Snow commeneed the manufactnre of children's shoes in 1867. He occupies half of a 2 story wooden building 30x45 feet, located on Washington street; employs from 25 to 35 hands; turns out about 1800 per week, and does business amounting to about $40,000 per year.

O. W. Roberts, manufacturer of wood and paper boxes; commenced business in 1867. The buildings occupied by him are a 2 story wooden building 40x60 feet with an ell 20x50 feet, used for the manufacture of wooden boxes and a 2 story wooden building 20x77 feet, used for the manufacture of paper boxes. He employs 16 hands, and consumes about 900,000 square feet of pine lumber and 50 tons of straw board per year. The machinery used in this business

is run by an engine of 20 horse power with a flue boiler of 25 horse power.

THE well known manufacturing firm of Messrs. JOSEPH HARRIS & SONS have a new factory on Elm street, in this town, which it is no exaggeration to say is not surpassed, and probably not equalled, for combination of capacity, convenience, elegance, thoroughness of finish and equipment, by any other similar establishment in New England. A building of this kind, taken in connection with the amount of business done within, and which goes forth from its walls, the number of people employed, and the great success which has attended its proprietors,—is really part of the history of the town, and as such merits more than a passing notice.

Messrs. Joseph Harris & Sons commenced the business of making shoes upon the bench, at the homestead on Harris court, Marblehead. They started in business on Pleasant street twenty years ago, working their own stock, and pursuing their calling with fidelity and industry. They continued in business on this street up to the 5th of February, 1867, when their establishment, with several other buildings, including the Baptist church, was destroyed by fire. Within the past few years their business had rapidly increased, and their trade was greatly extended, which is chiefly attributable to the good standing of the firm and the thorough workmanship of its goods. On being driven from Pleasant street, the Messrs. Harris removed to what is known as the Shawmut building, near the depot, and continued their business, though of course at a great disadvantage after the loss and business derangement to which the fire had subjected them.

The shoes made by them consist of ladies', misses' and children's fine sewed goods, and, at the new factory, pegged work has been added. These goods are sold in every State in the Union; and they export large quantities to foreign ports.

We suppose it is no exaggeration to say that, at the time of the fire, the arrangements of the firm would have admitted of doing a business of half a million dollars annually; and, indeed, in the year previous, the amount probably would not come far from four-fifths of this sum. As may be supposed, a firm whose energy and success had attained this point, would not be likely to remain idle long, and, in casting about for a location, pitched upon Elm street, as a place combining the requisite facilities for a first class manufactory. There were rumors that the firm would establish their immense concern elsewhere,—possibly in Salem,—and it is not improbable that inducements may have been suggested that caused them to weigh the reasons for and against a change. But, while any city or town would gladly have welcomed the addition of an honorable firm doing so extensive a business, we think the Messrs. Harris made no mistake in adhering to the good old town which was the home of their boyhood and the place of their business success, and which must be endeared to them by its patriotic record as well as from the pleasant remembrances and associations of a lifetime.

When they commenced business, twenty years ago, Mr. Joseph Harris and his sons, John and George, (the latter now dead,) constituted the firm. Two other sons, Thomas and Richard, have been added to it, and these four constitute the firm of Joseph Harris & Sons; and, it may truthfully be said that no firm stands higher in the shoe-trade. Mr. Harris, the father, is now about seventy-five years of age, and is still active and in good health; and takes great interest in the business, the active part of which of course now falls upon his energetic sons, who have displayed excellent judgment and good taste in furnishing the leading ideas by which this model manufactory has been reared to ornament the town and contribute to its prosperity.

The building is four stories high, and is of wood, of dark drab color, with basement of brick. The basement is entirely out of ground; but owing to the character of the land, the rear is deeper than the front.

All stock enters the basement through a western doorway and thence finds its way over the establishment. It is surrounded with no other buildings, and, standing out in bold relief, has the advantage of unobstructed light. Two long flights of steps lead to the two front entrances of the first story above the basement. The fourth story is of the French roof pattern, and the whole building is surmounted by a cupola upon which is a flag-staff where will float on all appropriate occasions, the American flag.

As viewed by the passer by, the building appears to be a solid square block; but it is really of the same dimensions as a building 150 feet long and 30 wide, drawn together so as to form three sides of a hollow square. The front is 90 feet long, and the two wings, which extend back at right angles, are each 60 feet in length; so that if the building were drawn out into a straight line, by swinging the two wings into the front line, the entire front length would be 210 feet. The height is 50 feet, and the establishment contains 200 windows, 40 of which are on the front. The brick basement and the steep French roof covered with dark slate, afford a pleasing contrast with the prevailing color, and add to the architectural symmetry of the structure. The exact cost of this establishment must exceed the sum of $30,000.

The boiler house is a brick building with a tall chimney towering above the main building, and is situated within the enclosure formed by the front and two wings of the manufactory. It is thus entirely obscured from public view. The boiler is a large one, sufficient to run a fifty horse engine, and was made by Mr. J. Haslam, of Salem. The size of the boiler house is 15 by 31 feet and the chimney is 70 feet high.

The building is very thoroughly built in every part, inside and out, and is capable of employing full 500 workmen, which is only about one-quarter more than the firm employs on an average. The second story is finished throughout with chestnut wood and black walnut trimmings. The doors are all of chestnut also, but the balance of the finish is western ash, with pine for the upper story. The floors are all of hard pine. The health and comfort of the operatives will be well cared for by the airy rooms and other conveniences. The entire basement stud is 12½ feet; second story stud, 11½ feet; third story stud, 10½ feet, and 4th story stud, 11 feet. Each story is provided with a washroom and water closet. Running from the basement to the upper story is an elevator, going to a height of 50 feet and connecting with every story. Water and heating arrangements are excellent.

As may readily be imagined, the view from the upper story and top is a fine one. Though the older portion of the town is obscured by the buildings on the intervening hill, the newer part, towards the west, is spread out in full view, and dwellings, shoe manufactories, and meeting houses, nearly all of which have been erected within a quarter of a century, exhibit the gradual growth and thrift of the respectable old fishing village of Marblehead. The land to the immediate west is for the most part unoccupied, but is included in the several farms here located, and will, no doubt, some day be brought into the market to supply the growing needs of the town. The distant view includes, upon the west, the heights of Dorchester, at the south the broad bay, with the long low line of the South Shore; at the north and east passing glimpses of the ocean, with the extent of the North Shore and its dense woods, and the spires and factory chimney and towers of Salem. Where there is such a commanding prospect, the facilities for a thorough ventilation must of course be ample, and one may

almost envy the comfort of working here with open windows during the hot summer days.

MARBLE RIDGE. A country station on the Lawrence Branch.

MARION, situated 10 miles from Fairhaven, and 50 from Boston, on the Fairhaven Branch of the Cape Cod Railroad. This village is situated about one mile from the depot, containing two churches, and about 1,000 inhabitants.

MARLBORO', 31¾ miles from Boston and 28¼ from Fitchburg. A village and town on the Boston, Clinton and Fitchburg Railroad; the Marlboro' Branch branches off here and joins the Boston and Fitchburg Railroad at South Acton, distance 13 miles. This town was taken from three towns, which belonged to three different counties, in 1803. The surface of the town is hilly and stony.

GEORGE W. HOWE established business here in 1868. He occupies a building 23x40 feet, for the manufacture of men's, boys', youths', women's, misses' and children's balmorals. Employs 40 hands, produces 300 pairs per day, and does a business of $100,000 per annum.

T. A. COOLIDGE established business in 1857, for the manufacture of women's, misses' and children's boots and shoes. He employs 100 hands, and manufactures 800 pairs of boots and shoes daily. He does a business of $250,000 yearly.

H. O. RUSSELL & Co. commenced business in the year 1862, for the manufacture of men's, boys' and youths' thick boots and shoes. They occupy a building 125x35 feet, employ 100 hands, and produce from 400 to 500 pairs daily. They do a business of from $150,000 to $200,000 yearly.

MATTAPAN, 6¼ miles from Boston, and 63¾ from Southbridge, a village on the Boston, Hartford & Erie Railroad, and at the terminus of the Dorchester & Milton Branch Railroad. Contains about 300 inhabitants and 3 churches.

MATTAPOISETT, situated 6 miles from New Bedford and 55 from Boston, on the Fairhaven Branch. The village contains about 2,000 inhabitants and 3 churches. The business is principally in the fisheries.

MEDFIELD, 19¾ miles from Boston, and 17¾ from Woonsocket, a village and town by the same name, situated on the Woonsocket Division of the Boston, Hartford and Erie Railroad. The village is 1½ miles from the station on the Charles river on an elevated plain.

CURTIS & Co., manufacturers and dealers in foreign and domestic straw goods, commenced business in 1856. They employ from 400 to 500 hands and do a business of $160,000 per annum.

MEDFORD STEPS, 4½ miles from Boston, a station on the Woburn Branch Railroad.

MEDWAY, 25¼ miles from Boston, and 12¼ miles from Woonsocket, a village of about 1,000 inhabitants, containing 1 church, in a town of the same name, on the Woonsocket Division of the Boston, Hartford, and Erie Railroad. Medway was taken from Medfield in 1713, and is watered by the Charles river.

C. PARTRIDGE & Co. This firm are manufacturers of boots and shoes, and do a business of $150,000 per annum.

MELROSE is a beautiful and thriving post village and township in Middlesex County, situated on the Boston and Maine Railroad, 7 miles north of Boston. It has a population of about 3,100; number of poles, 825; value of real estate, $1,608,974; value of personal property, $365,042; rate of tax, $1.70 per $100; number of dwelling-houses, 586; number of acres of land taxed, 2,921; number of churches, 5—1 Orthodox Congregational, 1 Universalist, 1 Baptist, 1 Methodist, 1 Episcopal. A Universalist society worship in a hall. There are 10 schools—1 high, 1 grammar, 2 intermediate, 3 primary, and 3 mixed. Average number of scholars attending, 575. The principal halls are the Lyceum Hall, on Main street, and the Masonic Hall, on the corner of Main street and Wyoming avenue. The principal buildings are the Masonic Block and the new school house, recently erected on Emerson street. It is of wood, 2 stories over basement, with a handsome French roof, making it nearly equal to 3 stories high. It cost upwards of $30,000. There are many fine houses, residences of merchants and others doing business in Boston and vicinity.

The principal manufacturing establishments are as follows:

EMERSON & Co., manufacturers of ladies', misses' and children's boots and shoes. This business was established more than 40 years ago by George Emerson. They occupy a large 3½ story wooden building, located on Emerson street, employ 75 hands, turn out about 180,000 pairs per year, and do business to the amount of $200,000. Office and salesrooms, Nos. 60 & 62 Pearl street, Boston.

J. C. CURRIER & Co., manufacturers of ladies', misses' and children's pegged boots and shoes. Commenced business in 1865. They occupy 2½ stories of a four story wooden building 30x60 feet, located on Emerson street. Employ from 40 to 50 hands, turn out 60,000 pairs per year, and do business amounting to $75,000. Their power is supplied by an engine of 10 horse power, built by Gifford & Houghton, of Fall River, Mass., with a tubular boiler, built by John Jarvis, of Boston, Mass. Office and salesroom, No. 69 Pearl street, Boston, Mass.

AUGUSTUS BARRETT occupies 1½ floors of a four story wooden building 30x60 feet, located on Emerson street, for the manufacture of ladies' and misses' boots and shoes. Commenced business in 1868. Employs about 40 hands. Office and salesroom, No. 75 Pearl street, Boston, Mass.

SMALL BROS. In 1863, C. W., J. M. and H. M. Small, commenced the manufacturing of furniture. In 1869, C. W. Small retired from the business, and the remaining brothers continued under the same name as before. They occupy a building 30x60 feet, three stories, with engine and dry house attached, 15x25, two stories. Their machinery is driven by a 15 horse power engine, furnished with steam from a nine inch cylinder boiler, made by John Davis. They employ 25 hands. They consume annually, about 25,000 feet of chestnut, 30,000 feet walnut, 12 barrels glue, and about $15,000 in upholstery goods. Their works are situated on Essex street, about one eighth of a mile below the depot, near the railroad.

METCALF'S, 7 miles from South Framingham, and 28 from Boston, a country station on the Milford Branch of the Boston and Albany Railroad.

METHUEN, 2 miles from Lawrence, and 24 from Manchester, a village and town on the Manchester and Lawrence Railroad. This town was taken from Haverhill in 1725; the soil is very good, the village is pleasant and the scenery around it romantic and beautiful. The Merrimac river flows on one side of it.

METHUEN WOOLEN MILLS, were incorporated in 1864; Josiah Bardwell, President, Charles H. Allen, Treasurer, C. B. Snyder, agent; office 69 Franklin street, Boston. These mills are situated on what is termed the Spickett river, with a fall of 9 feet. The main building is of wood, 3 stories 110x50, one other building in connection with these works is of brick, 2 stories, 50 feet square with wing, brick, 2 stories 120x35. The power is furnished by an 80 horse power engine, manufactured by the "Putnam Machine Co.," and 2 turbine water wheels, combined horse power of which is 85. They employ 175 hands; consume 450,000 lbs. of starch per year, and produce about 50,000 long and 100,000 square shawls per year. They run 48 looms, 10 sets of cards, 20 jacks and 200 spindles, and manufacture the Alexander, Standard, double and twist, Island, Sapina, Metropolitan and various kinds of check and gents' shawls.

CHARLES INGALLS commenced the manufacture of wool hats in 1834. They have now 80 employees.

BOWEN, EMERSON & Co. commenced business in 1864 for the manufacture of soft wool hats. Occupy a building 40x72 with ells. Employ 100 hands. They have the facilities for producing 100 dozen hats per day.

S. D. CHASE & SON, manufacturers of ladies', misses' and children's calf, buff, goat and grain boots and shoes. Their business was commenced in 1862; the name of the firm at that time Webster, Chase & Co. The partnership with Mr. Webster being afterwards dissolved, the present firm carried on the business under the name of S. D. Chase & Son. Their goods are made chiefly for western trade. They occupy a two story building 60x25 feet. They employ 40 hands and manufacture 30,000 pairs of shoes per year. They do a business of about $40,000 yearly.

MIDDLEBORO,' 34½ miles from Boston on the Old Colony and Newport Railroad. The Cape Cod Railroad joins the former railroad here. The place contains 10 churches and one printing office, from which is issued a weekly paper entitled the Middleboro' *Gazette.* A very flourishing academy is located here.

MANUFACTURERS.

THE STAR MILLS manufacture cassimeres. These works are situated on Nemasket river, and probably enjoys the finest water privilege in New England. They are built on the land formerly occupied by the first grist mill built in New England, and which was burnt during King Philip's war in 1640. Mr. L. Snow is President of Star Mills Co., Mr. George Brayton, Treasurer and T. L. Dunlap resident agent. This company has a capital of $180,000, and established here in 1864. Previous to this company's occupying these works, they were used by Messrs. Pierce & Wood for the manufacture of cotton goods and shovels.

The power of Star Mills is furnished by 1 high pressure steam engine, manufactured in New Bedford, and is of 35 horse power. They also use a French turbine water wheel, manufactured by Kilburn & Lincoln of Fall River, of 80 horse power. They use Crompton's patent looms, consume 450,000 lbs. of wool per year; produce $500,000 worth of goods annually.

MIDDLEBORO' BAY STATE STRAW WORKS, A. Alden & Co., manufacturers and dealers in straw goods. Mr. Albert Alden established business in 1858. In 1864 Mr. H. K. White associated himself with Mr. Alden, since which time the firm has been A. Alden & Co. They employ during the busy season 150 hands and about 800 families outside. This company are about building a fine machine shop opposite their factory. The building used as the factory is a fine 4 story wooden building with brick basement. This building covers a surface of 11,000 feet. This company consumes from $150,000 to $175,000 worth of stock per year, and their amount of sales for the same period amounts to from $225,000 to $300,000. Their salesroom is situated at No. 262 Canal st., New York. The second story of this building is used by them as a trimming shop, where they employ some 40 hands. This company are using machinery of the very best manufacture and of the latest improvement and produce goods that rank first in the market. They have built nine buildings used as dwelling houses by their employees. They are built of wood and 2 stories high, and are built in a manner best calculated to insure comfort to their inmates, and their architecture is of a very pretty and neat device.

WM. SIVERICK, manufacturer of harnesses and carriage trimmings. This manufactory is situated on Water street. Mr. S. established business in 1853. He occupies 1 building, built of wood, 2 stories, dimensions 35x65 feet.

C. D. KINGMAN, manufacturer of boots and shoes. Mr. Kingman established business here in 1849. About the year 1860 he associated himself with Messrs. Leonard & Barrows, under firm style of Leonard, Barrows & Co. In 1863 he withdrew from said firm, since which time he has continued by himself. He employs about 40 hands, and occupies 1 building of wood with brick basement, 3 stories, 35x50 feet.

LEONARD & BARROWS, manufacturers of boots and shoes, established in 1853 by Messrs. Perkins, Leonard & Barrows. In 1858 the firm was changed to Leonard, Barrows & Co., and five years later to Leonard & Barrows, which still continues. Messrs. L. & B. occupy 1 building, 4 stories, built of wood, 35x47, with wing, 18x45, situated in Well's Block, Main street, opposite the hotel. They employ about 100 hands, and produce about 600 pairs boots and shoes per day. The power is furnished by a steam engine of 10 horse power, manufactured by Thomas Seavitt, Boston.

J. H. HARLOW & Co., barrel, half barrel, and quarter barrel heads, nail kegs, boxes, &c., manufacturers. Mr. Harlow commenced business in 1862. In 1863 his building was destroyed by fire. He re-built immediately, however, and now produces work of the finest quality and in large quantities. Mr. H. employs about 40 hands, and occupies 1 building of wood, 2 stories. The power is furnished by steam engine, manufactured by S. E. Chubbuck & Sons, Boston, Mass., of 100 horse power.

J. B. LEBARON, manufacturer of stove, machinery and job castings, also window weights of all sizes. This business was established here by Tinkham & LeBaron in 1856. About the year 1863 this firm dissolved. Mr. LeBaron continuing the business. Mr. LeBaron employs 7 men, and occupies 1 building 84x50, known as the Foundry, and one used for a ware house 30x20.

PERKINS & BARROWS, Centre street, manufacturer of shoes. Mr. Perkins established business here under firm of Perkins, Leonard & Barrows. In 1859, this firm dissolved. Mr. Perkins continuing with Mr. Leach, the firm style being, Perkins and Leach, until 1861, when Mr. Leach withdrew. Mr. Perkins continued the business alone till 1866, when he formed a partnership with Mr. Barrows, under the firm of Perkins & Barrows. This firm employ 25 hands, and occupy 2 buildings, 2 stories, built of wood.

BROWN & SHERMAN, manufacturer of cotton yarns, spades and shovels. Messrs. B. & S.'s mills are situated at the foot of Water street, on the Nemasket river. They have the first privilege on this river with a reservoir of 7,000 acres, containing five large ponds. Cotton mill is built of wood, 3 stories and runs 3,300 spindles. This company consume in the manufacture of yarns, 6,000 lbs. of cotton per week, and produces upwards of 250,000 lbs. of yarn per year. The power here is furnished by 6 water wheels, 3 turbine and 3 breast.

The shovel works connected with this company were destroyed by fire, on the 9th of November, 1868. They are being rebuilt and will soon be in full operation. The dimension of this building will be 120x40; 3 stories with hammer shop connected 40x60. They have on their dam a saw mill and box manufactory. The shovel works, when completed, will be capable of turning out from 50 to 100 shovels per day. This company also manufactures large quantities of lamp wicking and twist.

JENNEY & MARCHANT manufacturers of men's, woman's and children's balmorals, oxford ties and brogans. This business was established by George Leonard, Jr., in 1842. Messrs. J. and M. succeeded Mr. Leonard, October 1, 1868. They occupy 1 building 2 stories 70x23, and employ about 30 hands.

MESSRS. PEARCE & WASHBURNE, Centre street. Mr. Pearce established business in January, 1867. In November, 1868, Mr. Pearce formed partnership with Mr. Washburne under the firm style of Pearce & Washburne. This firm occupies one building built of wood two stories 50x25, and manufacture trunks of different styles.

MIDDLEFIELD, 69 miles from Albany, and 131 from Boston, a village and town on the Boston & Albany Railroad. The village is 2 miles from the depot and contains a population of 350 and 2 churches. This is an elevated township, watered by a branch of the Westfield river. The inhabitants are mostly engaged in agricultural pursuits.

MIDDLESEX, 27 miles from Boston, and 1 from Lowell. A country station in the town of Chelmsford, on the Boston, Lowell and Nashua Railroad.

MIDDLETON. A village and town on the Lawrence Branch Railroad, 10 miles from Lawrence and 8 from Salem. The town has a population of 1,000, is on both sides of Ipswich river. The town was incorporated in 1728.

E. P. AVERHILL & Co. occupy a wooden building 24x30 feet, located on Main street, where they employ 30 hands, for the manufacture of ladies', misses' and children's boots and shoes. The business was commenced in 1848, where they turn out 1,000 pairs of boots and shoes per month, and do a business of $20,000 per annum.

F. P. MERRIAM & Co. occupy a three story wooden building 40x44 feet, with ell 40x30 feet, located on Main street, where they employ 175 to 200 hands for the manufacture of ladies', misses' and children's fine pegged boots and shoes. The business was established in 1840 by F. P. Merriam, and commenced under this firm name in 1847. This firm run from 50 to 60 stitching and pegging machines, made by different parties, and now turn out 3,000 cases of boots and shoes per year, (60 pairs per case,) and consume 2,700 sole leather per year. Does a business of $250,000 per annum.

W. H. HUTCHINSON occupies a 2 story wooden building 35x40 feet, located on Main street, where he employs 50 to 75 hands for the manufacture of ladies', misses' and children's boots and shoes. The business was established 1858, and now turns out 60,000 pairs of boots and shoes, and consume 500 sides of sole leather per year. This firm have in use from 15 to 20 stitching machines, made by different parties, and does a business of from $60,000 to $70,000 per year.

S. A. CUMMINGS commenced the manufacture of shoe knives in 1855. He occupies a building 55x30 feet; employs 3 hands. His machinery is driven by water power, and by an 8 horse power portable engine of McKay's make. Goods sold by Brooks & Young, 58 Pearl street, Boston.

MILFORD, situated on Charles river, 12 miles from Woonsocket, 28 from Providence, and 33¼ from Boston, on the Milford Branch. Milford is now connected by rail with Providence by way of (Woonsocket division) Boston, Hartford & Erie Railroad, two trains leaving Milford daily (Sundays excepted) connecting at Bellingham Junction with cars from Boston. A

branch from the Boston and Albany Railroad also runs here from Framingham, this being the principal route for passengers for Boston. Milford is now a city of about 11,500 inhabitants, contains 6 churches, 1 national bank, and 1 savings bank.

MANUFACTURERS.

SAWYER & RICHARDSON commenced business on Central street in 1862. The business, manufacturing of lasts, was established by Goodrich & Sawyer, in 1854. Their building, which they hire from I. N. Davis & Co., is 72x48 feet, 2 stories and attic. Employ 11 hands, and turn out 28,000 pairs lasts per year. This is the only manufactory of the kind in Milford. The lasts are all made by machinery (power hired with building) except shaving, which is done by hand.

I. N. DAVIS & CO. commenced the manufacturing of boot, shoe and straw goods boxes in 1865. The business was established in 1848 by Harris & Ballou. Messrs. D. & Co. occupy a 2 story frame building for their manufactory 60x40 feet engine and boiler house attached, of brick, 11x 60 feet, 1 story, containing a 25 horse power engine, built by Souther, of South Boston; a tubular boiler by McKay & Aldus. Employs 15 hand turns out 75,000 boxes per year, using from 1,000,000 to 1,500,000 feet lumber.

R. C. HUSSEY commenced business on Central street in 1864; removed in 1869 to Front street, where he now occupies a 2 story building 40 x 74, for the manufacturing of patent cutting boards. He also builds stairs, &c.; employs 8 hands, and uses about 12,000 feet lumber for a yearly production of cutting boards. His engine is 20 horse power, with tubular boiler.

LEE LIBBY commenced business in the town of Mendon in 1867, removed to 227 Main street in 1868, where he now occupies a 4 story building 46x33, for the manufacturing of heavy boots; employs in the shop 25 hands, and turns out about 2,000 cases per year.

E. MANN & SON commenced business at 229 Main street in 1867, for the manufacture of boots and shoes. The business was established by E. Mann in 1840. They occupy a 5 story building 172x40; employing 300 hands, turning out 10,000 cases boots and 5,000 dozen shoes per year. For running their stitching machines, &c., they have a 15 horse power Bradley's engine, made by Rouse, Evans & Clark, Piqua, Ohio, and 2 tubular boilers, made by Allen & Endicott.

JARVIS, HOWE & CO., manufacturers of patent boot tree machine and crimping machines, commenced business 1860. They have lately removed into their new 3 story and French roof building 40x80, where they intend to cary on the business on a larger scale. Their foundry building is 50x50, 2 stories, of brick; engine house 22x34, 1 story. The engine, of 30 horse power, was built by J. C. Page, and the tubular boiler by Kendall & Roberts. Employ 25 hands, using about $5,000 stock per year.

S. P. GOODRICH commenced business on Beach street in 1853, for the manufacture of all kinds of machines for making boots. In 1866 he removed to Central street, back of Jarvis, Howe & Co. into a 2 story building 40x20, employs 16 hands. His business is controled by the boot business, making it difficult to find his average production. The motive power is furnished by a 15 horse turbine wheel and 12 horse portable engine, built by the Swamscot Machine Company.

B. HAYWARD commenced the boot business in 1840; his manufactory is situated at No. 79 Central street, 36x40, 3 stories, employs 25 hands, turns out 1,500 cases hand made boots per year.

GEO. B. BLAKE & CO. commenced business in 1868. The business was established by Blake & Quiggle in 1865, for the manufacture of boots for the Southern, Western and New England trade. Their works are situated at No. 81 Central street, a 4 story building 35x50; they employ 75 hands and turn out 200 cases per month. The cost for their stock for 1867, was $71,725.55.

A. C. MAYHEW & CO. commenced the manufacture of boots in 1854, as successors of A. C. Mayhew, who established the business in 1835. Their factory is situated at No. 71 Central street, a building 80x35, five stories. Employs 125 hands, turning out 200 cases per week. The motive power is furnished by an 8 horse engine, made by Walworth, tubular boiler made by Chubbuck, of Roxbury. The work on boots is all done by machine, except bottoming.

CLEMENT COLBURN & CO. commenced business on Bow street, in 1858, for the manufacture of boots for the Western and New England trade, occupying a building 135x40, four stories; employs 300 hands and turn out, about 800 cases per month. The motive power is furnished by an 8 horse engine by Campbell, Whittier & Co. Harrison boiler.

J. W. LITTLEFIELD commenced business in 1867, for the manufacture of boot and shoe kits; his shop, situated on Central street, is on the first floor of building occupied by Sawyer & Richardson, room 36x37. Mr. L. employs 6 hands and turns out 15 dozen kits per week, using 4,000 feet lumber. The motive power is furnished with the room.

O. THAYER commenced business in 1838. Manufacturer of boots, occupying a 4 story building, 30x40 feet, situated at No. 75 Central street. He employs 25 hands, and turns out 300 cases boots per year.

JOHN P. DANIELS commenced business in 1839 for the manufacturing of boots for the Western trade; occupies a 3 story building, 40x42, on Central street, below the depot, with L, 36x28 feet, 2 stories. Employs 125 hands, and turns out about 4,000 cases hand made boots per year, stock costing about $60,000 for upper and $25,000 for sole leathers.

Z. THURBER commenced business on Pearl street in 1865 for the manufacturing of boots. He occupies a building 40x40 street, 4 stories with L, 20x20 feet, 2 stories, employs 70 hands, and uses about $70,000 stock per year, turning out 3,000 cases.

H. O'BRIEN commenced business in 1828, and is the oldest boot manufacturer now in the business in this place. He first commenced in the eastern part of Milford in a 1 story building 12 feet square. His manufactory now is situated at No. 76 Central street, a 3 story building, 30x50 feet. Employs 30 hands, and turns out 700 cases boots per year.

ALDEN & HARRINGTON commenced the manufacture of boots in a three story building 32x48 feet, at 74 Central street, in 1850. They employ 50 hands turning out 45 cases boots per week. The work is all done by hand.

CLAFLIN & THAYER commenced business as successors of Aaron Claflin, (who established it in 1851,) in 1866, at 66 Central street, where they occupy a three story building 85x30 feet, built of wood, in the first story they have machines for pegging and stitching; the upper stories are used by the bottomers. The finishing shop is situated at No. 72 Central street and is 70x30 feet, three stories of wood, between these two buildings is a three story stone building 50x25 feet, on the first floor is their eight horse power engine with two tubular boilers, made by McGee, of Woonsocket; the second and third stories are used for crimping boots, they employ 200 hands and turn out about 18,000 cases per year.

C. B. Godfrey & Co., boot manufacturers, commenced business in 1867, at 52 Central street, occupying a four story building 40x60, employing 100 hands, turning out 1,300 cases per year. Their boots are made principally for the California trade, out of calf, kip and sheep skins.

Cochrane & Thayer commenced business in 1868, at 50 Central street, in a five story building 125x45, for the manufacture of all kinds high grade boots and shoes. They also have in the rear a building 80x40 feet, four stories, used for bottoming boots and shoes. Employ 125 hands, turning out 10,000 cases per year. The motive power is furnished by a 10 horse power engine, built by McKay & Aldus, with two tubular boilers. This company use about $35,000 worth of stock per year.

Hopedale Machine Co. Wm. F. Draper, Treasurer; J. B. Bancroft, Superintendent; and George Draper, Agent. Established by J. B. Bancroft. They occupy buildings 185 x40 feet, 3 stories, 80x20 feet, 2 stories, and out buildings, for the manufacture of machinery, &c.; employ from 60 to 100 men, and doing a business of about $150,000 per annum.

The works are run by a 48 inch Leffel wheel, under 8 ft. fall, located on Mill river. In dry season they use a steam engine to help out. Their goods are all sold through Geo. Draper & Son.

George Draper & Son occupy buildings as follows: 80 x 24 feet, 80 x 30 feet, 64 x 30 feet, 80 x 70 feet, besides out buildings, for the manufacture of leather beltings. Employ from 60 to 75 men, doing a business of about $300,000 per year. Their works are situated on the Mill river, the waters of which drives a 48 inch Warren wheel, under 8 feet head, which furnishes the impetus for the machinery. Only in a very dry season they are obliged to use their steam engine. The above includes the works of the "Dutcher Temple Co.," for whom they are the selling agents; and the Hopedale Furnace Co., in which they are largely interested.

Underwood, Sons & Fisher, manufacturers of boots, shoes and brogans for California and Western trade. This is the largest and oldest establishment of the kind in the city and ranks among the first in amount of its production, and quality of goods in New England. The business was established by O. Underwood, Esq., in a very small way, forty odd years ago, delivering his stock in Boston, and returning would take enough stock to make another case. His mode of carrying his production to Boston, was to strap it in front of him to the saddle; this way of delivering goods, would to-day be a novel sight, but at that time was the common way. Mr. Underwood at that time was building the foundation to a business which has since proved so lucrative. They now have a large building 100 feet in length and 40 ft. in width, 6 stories high and basement, including a French roof which has double attics. This building is filled with machinery for stitching, pegging, &c.; driven by power furnished from their steam engine, which is situated in the boiler house 30x20 feet, one story. Steam pipes are laid in each room, for purpose of heating and to extinguish fires if required. They employ from 100 to 500 hands, as the business happens to be, turning out from 75,000 to 100,000 pairs per annum. Office in Boston, 29 Pearl street.

A. J. Sumner, manufactures on account for F. Jones & Co. Boston, men's, boys' and youths' thick boots. He occupies a building 3 stories high 30x28 feet, employs 48 men and produces 30,000 pairs yearly, valued at $62,000.

Milk Row, 1½ miles from Boston, a small station on the Woburn Branch Railroad.

Millbury, 37¼ miles from Providence, and 6 from Worcester, on the Providence and Worcester Railroad, a village in the town of Millbury, containing 5 churches and 1 bank.

MANUFACTURERS.

Millbury Cotton Mills. T. J. Harrington, Benjamin Flagg and George A. Flagg, proprietors. They commenced the manufacturing of print cloths in this mill in June, 1868, as successors to A. H. Waters & Co. The mill was built about the year 1844, and is 80x38 feet, 3 stories and basement, built of brick. A wooden building adjoining, connected by bridge, 34x70 feet, 3 stories; a picker house attached, 24x38 feet, 2 stories, and beyond that an engine house built of brick, 30x38 feet, 2 stories. They run 6,000 spindles, 132 looms, consume 700 pounds of cotton, and produce 4,500 yards per day. They employ 75 persons. The mill is located on the Blackstone, and run by 2 wheels, 1 breast and 1 Leffel turbine wheel, the fall being 13 feet.

Merriam & Simpson occupy a mill near the railroad, half a mile east of the depot, located on the Blackstone, commencing here in 1863 as successors to D. F. Wood. The mill was built of brick about the year 1832. It is 100x50, five stories, with ell 50x40, two stories and basement; an office and storehouse built of wood, and a brick dye-house 100x50, two stories, was built in 1865. This mill has five set of woolen machinery, 36 looms, employs 80 persons, consumes 30,000 pounds of stock, and produces 26,000 yards of satinets per month. An Upham turbine wheel furnishes the power for the mill, the fall here being 16 feet. This is said to be the surest and best water privilege in the town, having the water of the Blackstone and its tributaries at this point.

Riverlin Works, Buck Brothers, proprietors. They occupy a building about one mile from the depot, for the manufacture of chisels. The building is 130x40, one story; an addition was added in the winter of 1868–9. They commenced here in 1853, occupying this building since 1864. They employ 19 persons. A turbine wheel furnishes power for the works, which is located on a tributary of the Blackstone. This company produce about 45 dozen of chisels per day, and are the second oldest concern of this kind in the United States; D. R. Barton, of Rochester, N. Y., being the oldest.

Atlanta Mills was incorporated in 1865. Asa H. Waters, President; Wm. H. Harrington, Agent; Jonas Heald, Treasurer. The mill is located on the Blackstone, near the depot across the river. It is 100 x 30, 3 stories, with 2 L's, one 40x50, 2 stories, wood, the other 50x20, 1 story. They run 4 sets woolen machinery; employ 90 persons, consume 18,000 lbs. of wool per month and producing 14,000 yards of fancy cassimeres. It is run by 2 wheels,—one breast wheel 18x12 and a 5 ft. turbine wheel, the fall here being 13 feet. Agents in New York, Kendall, Updike & Co., Franklin street.

S. R. Parker employs 9 persons for the manufacture of carriages, occupying a 3 story wooden building in the centre of the village, manufacturing about 15 carriages per year.

Millbury Machine Co., Flagg, Chapman & Humphreys, commenced the machine business here in 1866, occupying 1 floor in the "Old Armory," near the depot. Employ 7 men.

John Martin runs a small foundry here, employing six men.

Braymanville, a small manufacturing village, one mile from the depot, containing one church; no post office is located here, the address being Millbury. The following manufactories are located on Singletary river, the source of which

is Singletary pond, 1 mile distant from the Blackstone, of which this stream is a tributary. It will be observed there are seven establishments on this short stream with an average fall of 21 feet:

JOHN RHODES commenced the manufacture of white cotton warps here about 13 years since. He occupies a mill, 40x60, 3 stories and attic, built of stone many years ago. The mill has 2,000 spindles, employs 30 persons, consumes 450 pounds of cotton daily, and produces 30,000 yards of warps per week. A Swaine turbine 36 inch wheel furnishes the power for the mill, the fall being 19 feet.

M. & S. LAPHAM commenced the manufacture of fancy cassimeres in 1865. They occupy a brick mill built in 1866. It is 182x52, mostly 4 stories, although a part has an attic which may be called 6 stories. The tower on one corner of the mill adds much to the appearance of it on the summit of which is a place designed for a clock, which has not yet been supplied. The mill is designed and has capacity for fifteen set of woolen machinery, five as yet only being supplied and in operation. In connection with which there are 18 broad and 6 narrow looms. They consume 800 lbs. of wool per day, and produce 4,000 yards per week; employing 95 persons. A 24x12 breast wheel supplies the power, assisted by a 60 horse power engine when needed. The fall here is 23 feet. Some persons call this the finest mill on the stream. Valkenburg & Harris, agents in New York, 97 Franklin street.

THE WHEELER COTTON MILLS was incorporated July, 1867, with a capital of $80,000. Willard D. Wheeler, President, J. D. Wheeler, Treasurer, I. H. Redding, Superintendent. The main building is 100x46, 4 stories in front and 5 in the rear, built of brick with picker room, &c., attached 25x46, 1 story. The mill has 4,000 spindles, 84 looms; employs 70 persons; consumes 800 pounds of cotton per day, producing 3,000 yards of sheetings. A 30½ inch Leffel turbine wheel supplies the power, the fall being 26 feet. This is the last mill on the stream, some 2 miles from the depot. This company are successors to J. D. Wheeler & Son, the business being established by J. D. Wheeler, the Treasurer.

MILLBURY WOOLEN MILL. Nelson Walling, proprietor. Commenced the manufacture of fancy cassimeres in 1853. The main building is 130x40 feet, 4 stories in front and 5 in the rear; a wing, 45x40 feet, 2 stories in front and 3 in the rear, all built of brick. They run 6 sets of woolen machinery, employ 110 persons, running 11 broad and 27 narrow looms; consume 4,000 pounds of wool per week, and produce 3,300 yards. A breast wheel supplies the power for the establishment, assisted by a 40 horse power Corliss engine when needed.

JAMES BRIERLY commenced the manufacture of 64 square print cloths in 1864, as successor to Emerson & Co. The building is built of wood, 130x36 feet, 3 stories and attic. The mill contains 3,528 spindles and 100 looms, consumes 2,800 pounds of cotton per week, and produces 17,000 yards. A 20x12 breast wheel supplies the power, assisted, when needed, by a 50 horse power Todd & Rafferty engine. Employ 52 persons.

EMERSON & BRIERLY commenced the manufacture of print cloths in 1865, as successors to S. Smith. The mill is 80x40, 3 stories and 2 attics, built of brick, with wing 44x24 feet, 3 stories. They employ 50 persons, run 3,552 spindles, 100 looms, consume 500 pounds cotton, and produce 3,500 yards of cloth daily. A 21x13 feet breast wheel furnishes the power. The fall is 18 feet.

CRANE & WATERS commenced the manufacture of knitted goods, knitting yarns, zephyr goods, socks, etc., as successors to Hosea Crane, one of the present firm, in 1856. The mill is 157x49 feet, 3 stories, with wing 100x26, 2 stories, built of wood, with dry house attached built of brick. The office and packing room is 90x30 feet, 2 stories, wood. They employ 150 persons, and do a business of about $200,000 per annum. A 24x12 feet breast wheel furnishes the power, assisted, when needed, by a 25 horse power engine. The fall here is 22 feet. They run 11 sets of machinery and 7 knitting frames, of which they own the patent.

CORDIS MILLS, B. B. Howard, Agent, manufacture ticks, stripes and denims. They occupy a mill 4 stories high, 180 x40 feet, and picker house 38 x 40 feet, 2 stories in height. They employ 125 hands, running 6,000 spindles and 1,211 looms, producing 275,000 yards yearly. The power is furnished by a 90 horse power engine when needed; also, by 2 Swaine turbine wheels, each 4 feet in diameter, having a fall of 14 feet. The mills are situated on the Blackstone river, and were organized January 1, 1864. They make from 2 yards to 4 yards per pound, consuming 20 bales of cotton per week. J. S. & E. Wright & Co., Selling Agents, Boston and New York. J. S. & E. Wright & Co., Proprietors.

ARMSBY & MORSE, manufacturers and dealers in doors, sash, blinds, &c., commenced business in 1848. They occupy a 3 story building 124x36 feet. They employ about 50 men, consuming 800,000 feet of lumber per year. The manufactory is located on the Blackstone river, and has 8 feet fall of water. They have a 5 ft. Jonval wheel.

Agents—D. D. Sweet & Co., Providence; J. F. Bailey, Boston; Bailey & Jenkins, Boston; Cutter & Parker, Boston; S. P. Langmaid & Co., Boston.

MILLBURY JUNCTION, 39 miles from Boston and 5 from Worcester. A station on the Boston and Albany Railroad, and at the junction of the Millbury Branch with the former road.

MILLER'S, 46¼ miles from Boston, 2¼ miles from Taunton depot, on the Old Colony and Newport Railroad. A flag station.

MILLER'S FALLS, formerly Grout's Corners, is on Miller's river, one mile from its mouth, in the town of Montague, at the Junction of the Vermont & Massachusetts and New London Northern Railroads. The place was formerly known as Grout's Corners. It is 7 miles from Greenfield, 14 miles from Amherst, 20 miles from Brattleboro' and four miles from the proposed new city at Turner's Falls. Here the river passes out from the hills that environ it during most of its course, and to the north, south and west, beautiful table lands, 100 feet above the level of the river, stretch out for miles, reaching into the vally of the Connecticut, and making a very eligible site for a large manufacturing town. The healthfulness of the place is unsurpassed. The soil is sand loam and well suited to market gardening.

Five good roads from the adjoining towns converge at this point, making communication easy in all directions.

The railroad communication is direct with New York by the N. L. N. R. R., and with Boston by Vt. & Mass. and Fitchburg Railroads. Nine passenger trains arrive and depart daily, going north, south, east and west.

Lumber at Miller's Falls is about three dollars per M cheaper than at Springfield and Holyoke, and wood sells for one-half the price in those towns. Very fine granite quarries are in the immediate vicinity.

Miller's Falls Manufacturing Co., manufacturers of Barber & Amidon's patent bit braces, brad awls, file handles, &c. This company was incorporated in 1869; H. L. Pratt, president, and L. J. Gunn, treasurer. The business was established by Gunn & Amidon, in Greenfield, several weeks ago. Their works, situated about 4 miles north of Depot, on the Connecticut River Railroad, were burnt down in January last. This Company, having bought one of the best water privileges in the State, propose to erect the present summer large and convenient shops for their own business, the manufacture of hardware. They own 4 good privileges, the first situated about 100 rods above the depot, a power of 30 feet fall is obtained, the third power of 16 feet fall they are improving for themselves. They build a dam 100 rods from the depot, and carry the water a short distance in a canal. The fourth power may be used a few rods below the third without a dam. When this establishment is completed they will employ a force of 100 or more, and do a business of $125,000 per year.

Mill Village. A small village, one mile from Dedham, on the Mill Village branch. A "dummy" leaves Dedham for this place on the arrival of every train.

Millville, a village of some 1200 inhabitants on the Blackstone, 20¼ miles from Providence, 23 from Worcester, on the Providence, Worcester and Boston, Hartford and Erie Railroads. There are 2 churches and no banks.

The Millville Manufacturing Co., Edward S. Hall, Proprietor, is the only manufactory here, commencing in 1346. The main mill is about 125x45, 4 stories and basement, with dye, dry and picker house attached 145x40, three stories; the old mill situated nearly opposite is 85x35, 3½ stories. These mills keep 375 persons busy; run 20 sets of woolen machinery; consume 2,500 pounds of wool per day, and produce 500,000 yards of fancy cassimeres, &c., yearly. The power is furnished by 3 Fall River and 1 Tyler wheel; the fall is 14 feet, only about half the power being occupied. Marcien Jenks, Superintendent.

Milton. A village 8 miles south of Boston, in a township by the same name, contains many elegant residences, and is noted for its delightful scenery. Population of this town, 3,000.

Monson, 61 miles from New London, and 39 from Grout's Corners, (now Miller's Falls) a station and town on the New London & Northern Railroad. A pleasant town of variegated surface, good soil and well watered by the Chicopee river.

Charles Fuller's cigar manufactory and leaf tobacco warehouse. Established 1862. Has a building 3 stories high 35x75 feet, employ from 12 to 20 hands, make nothing but fine Havana cigars. Does business from $100,000 to $200,000 per annum. He claims that he is the sole manufacturer of the best brand of cigar in New England, the "Legal Tender." Building joins the New London & Northern Railroad 60 feet from passenger and freight depot.

Montague is situated nearly opposite Greenfield, on the east bank of the Connecticut river. The Turner Falls Water Power Co. are to have one of the most extensive water power in New England, by constructing a dam across the Connecticut river at Turner's Falls, in this town. The village contains three churches, and 400 inhabitants.

Woodward & Brown occupy a two story wooden building covering about half an acre of ground, for the manufacture of pianos of every description; also, occupying four floors 125x25, of a five story brick building, situated at No. 387 Washington street, Boston, used as an office and salesroom. The busines of this firm was commenced in 1843; have 30 employees, turn out 300 pianos per annum, and do business to the amount of $90,000.

George F. Richardson & Co. Business established April 1st, 1868. They occupy a three story main building 60x30 feet, and three smaller ones, manufacture chestnut and pine chamber furniture, chestnut and black walnut extension tables. Employ 20 hands, and do a business amounting to about $60,000 per annum.

Monterey, 6¼ miles from Boston, and 11¾ from Stoughton, a country station on the Stoughton Branch Railroad.

Monterey Paper Mill, established 1842. Buildings occupied consist of main building, engine and finding rooms, 30x55 feet; machine room, 20x55 feet; bleaching and stock room, 24x55 feet; wheel house, 50x18 feet. Manufacture manilla paper, employ 8 hands, and produce 175 tons per annum. Use two 300 lb. engines, and one 42 inch cylinder machine. The motive power is supplied by a water wheel under 22 feet fall.

Monument, a fishing village situated on Monument river which flows into Buzzard's bay. The village, of about 200 inhabitants, is situated 55¼ miles from Boston, and 24 from Hyannis, on the Cape Cod Railroad.

Mount Auburn, 5½ miles from Boston and 5½ from Waltham, a station of about 200 inhabitants on the Watertown branch.

Mount Bowdoin, four miles from Boston and 66 from Southbridge, a village of about 200 inhabitants on the Boston, Hartford and Erie Railroad.

Mount Tom, 15 miles from Springfield and 2 from Northampton, a station on the Connecticut River Railroad, taking its name from a mountain in that vicinity, which is 12,000 feet above the river. From this mountain a view of a wonderful variety of landscape scenery can be had—probably unsurpassed in beauty by any in the New England States.

Myricks, 42 miles from Boston, 6½ from Fall River, on the Old Colony and Newport Railroad. The New Bedford and Taunton Railroad crosses here.

Mystic, seven miles from Boston, a small station on the Woburn Branch Railroad.

John Bacon. The manufacturing of feltings

GOULDING & PARMENTER,

MANUFACTURERS OF

CHAMPAGNE CIDER

—AND—

CIDER VINEGAR,

SOUTH NATICK, - - - - - MASS.

was established by Robert Bacon & Sons in 1825, and carried on many years by them, when John Bacon succeeded to the business. The factory is a 3½ story building, built of wood 35x80 feet with engine room attached 20x35 feet, of brick fire proof, having dry rooms in the second story or floor; two store houses 70 feet square.

They employ only 10 hands at the works, a large amount of work being done outside. When running on batting they have one machine which consumes 1,000 lbs. stock daily. The motive power is furnished from a 35 horse engine, built by Adams, of East Boston. The mill is thoroughly heated by steam from a tubular boiler, built by Cunningham, of Charlestown.

NANTASKET, about 20 miles from Boston, a country station on the South Shore Railroad, in the town of Cohasset. Nantasket Beach is much resorted to by the citizens of Boston for sea bathing, &c.

NATICK, 17 miles from Boston and 27 from Worcester, a village and town on the Boston and Albany Railroad. A branch leaves the main road here for Saxonville, 3 miles distant. This is a pleasant town of good soil, watered by the Charles river and several delightful ponds. The first Indian church in New England was formed here in 1660, under the advice and direction of Elliot. The town was incorporated in 1781, and has a population of 6,000.

MANUFACTURERS.

CHURCHILL & PRATT occupy the 1st floor of wooden building 36x40 feet, for the manufacture of shoe blacking, dressings and varnish; commenced business in April, 1868; employ 3 hands; do a business of $8,000 per year; manufacture about 500 gallons per week.

F. HANCHETT & Co. occupy a 3 story wooden building 40x45 feet, located on North Main street, commenced business in 1863 for the manufacture of boots and brogans, employ 75 hands, turn out 150 cases boots and 2,000 pairs brogans per week; do a business of $200,000 per annum.

HOWARD & WHEELER occupy a two story wooden building 40x50 feet, located on Cochituate street, as a planing mill, and for the manufacture of boxes; commenced business in Oct. 1865; employ 12 hands, turn out 4,000 boxes per month; run a 25 horse power engine with flue boilers; do a business of about $20,000 per annum. Their machinery consists of 7 circular saws, 2 maching machines and a variety of other smaller machinery.

DAMON, THOMAS & LEWIS, Nos. 36 and 38 Summer st. Established in 1852 by C. B. Travis. Occupy one building, 5 stories, 40x45; employ from 125 to 150 hands, manufacture men's, boys' and youths' kip and split boots, balmorals and brogans. Quantity produced daily, from 600 to 1,000 pairs. Amount of business done, from $225,000 to $250,000 per year; consume about 15,000 sides sole leather, 25,000 sides of wax, kip and grain leather, 1,200,000 lbs. of splits. Their boiler was built by Thomas Cunningham, of Charlestown, Mass., capacity 24 horse. Their engine, by the Lowell Arms Works,—patent double cylinder,—and is 12 horse power. Store in Boston, 57 Hanover street.

CALVIN H. PERRY occupies a 3 story wooden building, 26x40 feet, located on Pond street, for the manufacture of brogans and women's lace boots. Commenced business in 1842, employs 60 hands, and turns out 1,200 pairs of shoes per week, doing a business of $60,000 per annum. Store 78 Pearl street, Boston.

G. P. & B. W. FAY occupy a 2 story wooden building, 52x140 feet, with 2 L's, 20x30 feet each, located on Railroad avenue, for the manufacture of wool hats of every style and quality for men's wear. Commenced business in 1861, employ 150 hands, turn out 6,000 cases of hats per year, run an 80 horse power engine, built by the Putnam Machine Company, with 3 boilers, 42 horse power each, built by John Lally, South Boston, and do a business of from $250 to 300,000 per annum.

J. O. WILSON occupies a 3 story wooden building, 30x65 feet, for the manufacturing of shoes. Commenced business in 1845, employs 80 hands, and cuts up 14,000 sides of sole leather and 16,800 sides of upper leather per annum, and turns out 168,000 pairs shoes annually.

D. C. HOWE occupies a 2 story wooden building, 28x40 feet, for the manufacture of mens', boys' and youths' split and kip boots, He employs 20 hands.

CURRY & FAVOUR occupy a 2 story wooden building, 16x 30 feet, with 2 story L attached, 16x16, located on Common street, for the manufacture of hand-made boots and shoes. Commenced business in April, 1866, employs 20 hands, and turns out 1,000 cases boots and 250 cases shoes per annum.

RICHARD HAYES occupies a 2 story wooden building, 20x 45 feet, with L, a 2 story wooden building, 20x25 feet, located on Summer street, for the manufacture of shoes.

Commenced business in 1842, has 45 employees, and turns 60,000 pairs per annum.

Dexter Washburn occupies a two story wooden building 32x50 feet, and basement, located on South street, for the manufacture of shoes. Commenced business in March, 1868. Employs 12 hands, and turns out 300 cases per annum.

E. Walcott & Co. occupy one floor 75x75, and one of three buildings in four story wooden building known as Walcott's Block, located on the corner of Main and Central sts., for the manufacture of shoes and brogans. Commenced business in 1858; have 75 employees, and turn out 1,500 cases per annum.

Albert Mead occupies a two story wooden building 35x 40 feet, located on Plain street, for the manufacture of shoes. Commenced business in 1858; employs 30 hands, and turns 15 cases of shoes per week.

Russell S. Bent & Co. occupies 2 rooms containing 2,125 square feet and basement, in a 2 story wooden building, located on Summer street, for the manufacture of shoes. Commenced business September, 1866; employ 30 hands and turn out 1,000 cases per year.

E. Washburn occupies a 2½ story wooden building. 22 x 43 feet, with basement, located on Plain street, for the manufacture of shoes. Commenced business in 1832; employs 30 hands, and turns out 900 pairs per week.

H. Harwood & Son occupy a 2 story wooden building 30 x50 feet, located on Walnut street, for the manufacture of base balls of every description. Commenced business 1858; employ 100 hands.

J. F. Felch & Co. occupy a 3 story wooden building 17 x45 feet, located at the northern part of Natick, near Cochituate, for the manufacture of men's, boys' and youths' kip and wax brogans. Commenced business in 1864; employ 35 hands, turn out 2,100 pairs per week and do business to the amount of $100,000 per annum.

Pebbles, Woodman & Co. occupy a three story wooden building with L attached. Main building 33x75 feet, L 25x40 feet, located on Spring street, near the Boston & Albany Railroad, for the manufacture of boots and shoes. Business first established by Mr. Pebbles, in 1860. This firm has 130 employees, and turn out 6,000 pairs of shoes and 600 pairs of boots per week.

C. E. Johnson & Co. occupy a four story wooden building 35x80 feet for the manufacture of shoes; turn out 600 pairs of shoes per week. Consume 800 sides of leather per week.

South Natick is located in this town, about 2 miles from the station of Natick, and contains two churches. The Unitarian church located here, was built about 200 years ago, on the spot where the apostle John Elliot used to preach to the Indians. There is a monument erected here to his memory. He was born 1604 and died May 20, 1690.

Goulding & Parmenter occupy the first and second floor of a wooden building 44x68 feet, two miles from Wellesley station, on the Roston and Albany Railroad, for the manufacture of champagne cider and cider vinegar. Commenced business in 1866; employ 3 hands, run by a ten horse power steam engine, made by the Salem Machine Co., one upright boiler, made by the same Co. Do a business of $6,000.

E. H. Clark occupies the second story of a two story wooden building 35x40 feet, for the manufacture of base balls. Commenced business May 1st, 1868. Employs 20 hands.

Felchville is located here, near Natick village. The manufacturers are as follows:

C. H. Felch occupies a 2 story wooden building 20 x 60 feet; a store house 28x30 feet, located on North Main street for the manufacture of shoes of every description, turns out 1,800 pairs per week; consumes 24 sides of leather per week, does a business of $80,000 per annum. Commenced business in 1860.

Alonzo F. Travis occupies a 4 story wooden building 32 x45 feet, located on North Main street, for the manufacture of brogans, balmorals and plow shoes. Commenced business in 1852; employs 90 hands, turns out 3,000 pairs per week, does a business of $150,000 per annum.

Wayland, a village and town 3 or 4 miles from Natick station. The name of this town was East Sudbury, from 1780 to 1835. The surface is pleasant, the soil is generally good. The Sudbury river lies on one side.

O. T. Lyon & Co. occupy a 2 story wooden building 28x 32, for the manufacture of brogans; commenced business in 1860; employ 27 hands, turn out 1,000 pairs per week.

Thomas Bryant occupies a 1 story wooden building 20x x30 feet, for the manufacture of boys' and youths' wax brogans; commenced business in 1843; employs 20 hands and turns out 600 pairs per week.

T. & H. C. Dean occupy a 3 story wooden building 25x 25 feet, for the manufacture of brogans; commenced business in 1865; employ 40 hands and turn out 1,800 pairs per week.

Needham, 12¾ miles from Boston, 25¾ from Woonsocket and 41 from Providence, on the Woonsocket division of the B. H. & E. R. R., a station and town by the same name. The town is nearly surrounded by the waters of Charles river. The village contains one church and 200 inhabitants.

Needham Hosiery Co., I. A. Hatch & Co. proprietors, commenced the manufacture of knit goods, in 1865, in a four story building 40x80; running 1 set cards, 2 jacks 50 looms; has employed 70 hands, using 400 lbs. wool, and turning out 10 dozen gloves and 250 dozen stockings per day The motive power is derived from a two horse power engine, one flue boiler.

John & Mark Lee, manufacturers of hosiery, commenced the business in 1856. They occupy a three story building 30x70 feet. They employ 40 hands, and produce 6,000 dozen of fancy hosiery yearly. They do a business of $30,000.

I. Farwell & Co. occupy a two story wooden building 30x80 feet, located at Needham Lower Falls, for the manufacture of sewing silk of all kinds and colors. Commenced business in May, 1865. Employ 35 hands; run 950 spindles, 2 doublers, 4 winders, 5 spinners, 3 reelers, 1 stretcher, 6 spoolers, 3 cleaners, 1 matcher; run a 12 horse power engine, also a 12 horse power water wheel, over shot 20 feet, built by Eaton & Moulton. Dye house attached 30x40 feet. Office No. 1 Buggy place, off Arch street, Boston, Mass.

Neponset, 5 miles from Boston on the Old Colony and Newport Railroad; a branch railroad to Mattapan leaves the Old Colony here. See Dorchester.

Day & Collins occupy 2½ acres of land, on which are buildings covering 22,000 square feet of room, located on Mansfield's Wharf, for the manufacture of hydraulic cement pipe of all descriptions; commenced business in Jan. 1867; employ from 40 to 50 hands and turn out 25,000 feet of pipe, varying in size from 3 to 24 inches.

NEW BEDFORD, 55 miles from Boston, 31 from Mansfield, and 50½ from Providence, via Mansfield, at the terminus of the New Bedford and Taunton Railroad, and on the west side of the Acushnet river, emptying into Buzzard's Bay. The ground on which the city stands rises rapidly from the river, and affords an interesting view from Fairhaven. The harbor, though not easy of access, is capacious and well secured from winds. A bridge connects it with Fairhaven. A steam ferry boat runs at intervals between the two places. New Bedford was incorporated in 1787, previous to which it constituted a part of the town of Dartmouth. In 1812 the eastern part was set off as a separate township, by the name of Fairhaven. Incorporated as a city in 1847. The City Hall, Custom House, Alms House, Free Public Library and House of Correction are the principal public buildings. A very fine view of the harbor and ocean can be had from Point road, a drive 4 miles in length made at the expense of the city; it runs to Clarke's Point, at the extremity of which the United States are erecting a fort built of granite that will mount 78 guns. There are 4 national and 2 savings banks, 5 insurance companies, 2 daily and 3 weekly newspapers, and over 20 churches.

The whale fishery is more largely carried on here than at any other place on the globe, being pursued as early as 1755, with varying success. The largest business being done between 1818 and 1857, since which time it has been on the decline, up to 1867, when it again in a measure revived, the rebellion causing many of the best ships to be taken and burned by privateers. The number of vessels engaged in the whale fishery during the Revolution were from 50 to 60; in 1844, 219 vessels, averaging 69,803 tons; in 1857, 329 vessels, measuring 111,364 tons; in 1865, 175 vessels, measuring 58,082 tons; in 1867, 178 vessels.

The total number of whaling vessels owned in the country in 1868, was 338, including 19 ships, 176 barks, 21 brigs and 83 schooners. Of this number 40 ships, 133 barks, 1 brig and 4 schooners hail from New Bedford. The fleet of 1867 numbered 342 vessels. The Atlantic fleet in 1868 numbered 149 vessels, and the aggregate catch 19,209 bbls. sperm oil, against 154 vessels and 18,809 bbls. oil in 1867. The North Pacific fleet in 1868 numbered 72 vessels, with a catch of 48,005 bbls., against 105 vessels and 67,241 bbls., in 1867. The average catch per vessel of the North Pacific fleet, in 1868, was 667 bbls., larger than in any year since 1863.

The importation of catchings in 1868 includes 18,029 bbls. sperm oil, 68,169 bbls. whale, and 870,497 lbs. bone, against 43,433 bbls. sperm, 89,289 bbls. whale and 1,001,397 lbs. bone, in 1867. The export to foreign countries in 1868 included 18,788 bbls. sperm, 7,927 bbls. whale, and 723,502 lbs. bone, against 25,147 bbls. sperm, 18,253 bbls. whale, and 717,796 lbs. bone in 1867. The home consumption in 1868 included 21,235 bbls. sperm. 75,239 bbls. whale, and 221,278 lbs. bone, against 22,074 bbls. sperm, 59,866 bbls. whale, and 176,991 lbs. bone, in 1867. The stock on hand in the country January 1st, 1869, included 13,000 bbls. sperm oil, 16,700 bbls. whale, and 200,000 lbs. bone, against 7,994 bbls. sperm. 31,697 bbls. whale, and 274,283 lbs. bone, January 1st, 1868.

Sperm oil steadily declined through 1868, from $2.15 per gal. at the close of 1867, to $1.90 in July, $1.80 in September, and $1.75 in December. The average price for the year was $1.92⅔, against $2.34 in 1867. Whale oil, on the contrary, has kept a higher range, opening in January, 1868, at 62 and 65 cents, going to $1.25 in October, and closing with the year at $1. The average price for the year was 95½ cents, against 74⅞ in 1867. The average price of all kinds of bone, in 1868, was $1.01¾ per lb. against $1.16¾ in 1867.

The year's business for 1868, was moderately successful. The sperm whalers, with a few exceptions in the Atlantic ocean and on the New Zealand ground, have not been very fortunate, while most of the Arctic right whaling fleet did a very good business.

Up to 1847, few places in Massachusetts increased so rapidly as this, but for the past 20 years New Bedford has not increased in size as much as would be expected from its location. New Bedford and Providence are rivals in regard to the proportionate wealth of their population. It is safe to say that these two cities are the wealthiest according to their population, of any cities in the United States.

MANUFACTURERS.

Wamsutta Mills, incorporated 1846. Joseph Grinnell, President; Andrew G. Pierce, Treasurer; Thomas Bennett, Agent. Office located in New Bedford. Capital $2,000,000; 80,000 spindles; 1,600 hands employed; consume 8,500 bales cotton, manufacture fine Wamsutta shirtings.

Selling Agents: Almy & Co., New York and Boston; Cadbury, Rhoades & Thomas, Philadelphia; Chase, Stewart & Co., Baltimore; Collins Bros. & Co., Hartford; Taylor, Symonds & Co., Providence; George M. Eddy & Co., New Bedford.

Wm. G. White commenced the manufacture of carriages of every description in 1838. He occupies a building on Pleasant street, 33x40 feet, 3 stories, employing 7 persons, and producing 23 carriages per year, amounting to about $10,000.

Henry V. Davis occupies a building 60x150, 1 story, on Court street, commencing here in 1843. He employs 15 persons, and produces 80,000 lbs. prussiate of potash, 10,000 cyanuret of potasse and 15,000 of Prussian and celestial blues annually. Office No. 40 North Water street.

The New Bedford Copper Co., office Rodman corner Front streets., works near Wamsutta mills, in the northern part of the city. Was incorporated 1860. Capital $500,000. James D. Thompson, President; Wm. H. Mathews, Treasurer; Henry Field, Jr., Superintendent. The rolling mill is 187x81 feet; mixing house, 10)x56, 1 story; refining house 60x56, 1 story, boiler house 40 x 33; office and store house 200 x 251, and 2 stories; cupola 60 x 36. They employ 90 persons and 2,500,000 lbs. of copper and metal yearly. A large coal yard is connected with the works and adjacent to the water, where the coal is carried by rail to the various bins prepared to receive it. This company claim to have the finest arranged copper works in the United States, being all under one roof and easily superintended by one person. A 250 horse power Woodruff & Beach engine supplies the power.

W. A. Robinson & Co. occupy 4 buildings, averaging 2 stories, built of stone and brick, covering about 2 acres, located at South Water, corner Front street, for the manufacture of sperm and whale oils, candles, &c., commencing here in 1841; employ 12 persons. This firm is one of the oldest and heaviest dealers and manufacturers of oils in this city. Office in Providence, 10 South Water street.

Forbes & Sears occupy 2 buildings at 33, 34 & 35 Elm street, for the manufacture of light carriages, commencing here in 1862. Employ 30 persons, producing 100 carriages, and doing a business amounting to $30,000 per annum.

Brownell, Ashley & Co. commenced the manufacture of carriages in 1848. They occupy 3 buildings at Spring, corner 4th street, employ 23 persons, and do a business of $40,000 per annum.

The Daily Mercury.

(ESTABLISHED IN 1831.)

Published every Morning, by FESSENDEN & BAKER, at $7.00 per annum.

The New Bedford Mercury.

(ESTABLISHED IN 1807.)

Published Weekly, on Thursday Afternoon, at $2.00 per annum.

JOB PRINTING, BY STEAM, IN EVERY VARIETY.

H. G. O. Cole commenced the manufacture of carriages in 1853. He occupies a building at 44 South Third street, 100x80, 3 stories, employing 22 persons, and producing 60 carriages, and doing a business amounting to $15,000 per annum.

Samuel Leonard & Son commenced the manufacture of sperm and whale oils, sperm and patent candles, oil soaps, &c., in 1853, as successors to Samuel Leonard, who established the business in 1837. Their works cover an area of an acre of ground, located on Leonard street, corner Cross. They employ 20 persons, and produce 20,000 barrels of oil yearly. Well known and long established. Agents, Mixer, Whitman & Co., 159 Front street, New York, and 44 Broad street, Boston.

John A. Gifford occupies a building, 40x100 feet, 3 stories, built of stone, at 90 South Water street, for the manufacture of general machinery. He employs 15 persons, and does a business amounting to $20,000 per year. A 40 horse power Chubbuck & Campbell's engine supplies the power. He commenced here in 1867, as successor to J. C. Bradford. The business was established by Taber & Grinnell.

Jos. G. Grinnell occupies a building at 90 South Water street, 60x75, 1 story, for the manufacture of iron castings for ship work. Employs 13 persons, melts 1½ tons of iron daily, and does a business of about $50,000 per annum.

John H. Perry & Co. commenced the manufacture of paints and colors in 1850, at Walnut street, corner South Water. The building is 65x40 feet, 3 stories, built of wood. They employ 4 persons, and do a business amounting to $50,000 per annum.

The Taber Plane Co. is located at 133 North Water street, having a capital of $16,000. John T. Knowles, 2d, President and Treasurer, D. N. Haynes, Superintendent. They occupy 2 one story buildings; employ 9 persons and produce 75 planes daily; a 10 horse power engine supplies the power. They make a speciality of Taber's bench plane, besides making common wedge planes. Office of the Treasurer, Front corner Commercial.

Smith & Varley, 126 Ray street, occupy a building 40x 25, 2 stories, for the manufacture of family soap, commencing here Sept. 1868. They do a small business and hardly in operation at the time of canvassing.

New Bedford Paraffine and Lubricating Oil Co. Watson Ryder agent. This company commenced here in 1862, they occupy several buildings foot of Howland street, for distilling and refining oil; employ 7 persons and do a business of $75,000 per annum; capacity of the works 6 to 8,000 barrels annually.

Job Wade occupies a building 100x50, 3 stories, foot of Wall street, for the manufacture of calf skins, wax and imitation leather. He commenced here Dec. 1868, as successor to Sherman, Wade & Co., who established the business in May previous.

Gifford & Allen occupy a building on Front street, corner Hazard's wharf 40x50, 2½ stories, wood, used for store house and office, a brass foundry 40x25, 1 story with small buildings attached for the manufacture of brass work for ships generally. They are successors to Gifford & Topham, the business being established by Geo. G. Gifford in 1837. They employ 10 persons and do a business amounting to $30,000 per year.

Thayer, Judd & Co. occupy a main building 40x100, 2 stories, brick, a stone building 200x40, 1 story, a wood building 25x80, 2 stories, at 114 North Water street, for the manufacture of patent paraffine candles and lubricating oils. They commenced here Nov. 1st, 1868, as successors to the New Bedford Oil and Candle Company, who commenced here 1865. They employ 15 persons and produce 1,500 lbs. of stock daily, using 10 candle machines.

H. Ryder & Co. occupy a building on Fish Island 25x30, 1½ stories, for distilling oil, a building at 124 Ray street 30x 80, 1 story with wing 24x24, for the manufacture of oil and patent paraffine candles. Their main works are at 114 North Water street, and are now occupied temporarily by other parties. They employ 15 persons. This business was established by H. Ryder in 1859, who owns and controls the various patents for manufacturing paraffine candles, which is a process entirely new.

New Bedford Tanning Co. was incorporated 1864. Capital $100,000. George Wilson, President; Thomas H. Knowles, Treasurer. The works are located on Court street, near the limits of the city, and cover about 2 acres of ground. The main building is 100 x 60 feet, 3 stories, wood; hide house 100x40, 2 stories, wood; smaller buildings and sheds attached. They employ 45 persons and produce 30,000 calf skins and 1,000 hides per year. A 30 horse power engine supplies the power. The business amounts to $130,000 per year.

The New Bedford Glass Co. was incoporated 1866. Capital $100,000. T. B. Wilcox, President; George R. Phillips, Treasurer. The works are located on Prospect st. The main building is 180x50 feet, 3 stories, built of brick. They employ 100 persons and sell about $100,000 worth of pressed and blown table ware, lamp goods, &c., yearly.

Z. Whittemore commenced the manufacture of soap in 1826. He now occupies a building at 14 South Second st. 32x90, 2 stories, making all kinds of family soap.

GEORGE S. HOMER,

(Successor to S. Thomas & Co.)

Manufacturer of

OILS!

Sperm, Whale and Blackfish Oils, Sperm and WHALE OIL SOAP,

SPERM CANDLES

AND REFINED SPERMACETI IN CAKES FOR DRUGGISTS' USE,

Also Dealer in

STRAITS, BANK AND SHORE OIL AND PURE COD LIVER OIL FOR MEDICINAL PURPOSES.

No. 23 Centre Street, - - New Bedford, Mass.

HASTINGS & Co. commenced the manufacture of lard oil at Springfield in 1845. In 1849 they removed to Boston, where they engaged in the manufacture of sperm and whale oil. They removed here in 1854, the centre of oil manufacturing in the United States. They continue the business foot of Grinnell street. The main building is 200 x 70 feet, the works covering an area of 3 acres, with a wharf projecting into the harbor 400 feet, with a frontage of 100 feet. They employ 20 persons, and have a capacity for producing 200 barrels of whale oil daily. Office in New York, 154 Front street.

SOUTH SHORE BOOT AND SHOE CO., Washington corner Sears sts., was incorporated 1868, the business being established in 1865. Capital $30,000. George F. Kingman, President; Edwin P. Taylor, Secretary, Treasurer and Agent. The building is 40x60 feet, 4 stories. They employ 100 persons and produce 40,000 pairs of women's and misses' boots and shoes per year.

HATHAWAY & SOULE occupy a fine brick building 50x35, 3 stories, at Pleasant street corner Mechanics lane, for the manufacture of men's and boys' calf boots and shoes, employing 40 person and producing $60,000 worth per year. This firm commenced here July, 1865, and make the finest article for the New England trade only.

WALES & Co. occupy a building, 54x60 feet, 3 stories, with ell, 36x40, 1 story, built of stone, situated on First, corner Fourth, for the manufacture of paraffine wax candles and oils. The business was established by J. Wales about 1867, the capacity of the works is 2 tons of fine stock per week. A 10 horse power engine supplies the power.

GEO. S. HOMER commenced the manufacture of sperm and whale oils, October 1st, 1867, at 23 Centre street, being successor to S. Thomas & Co., who established the business many years ago. The works are on South, corner Front street, covering about an acre of ground, comprising 2 main buildings, 100x35 and 50x75 feet, 1 story respectively. The office and store house is 35x35, 4 stories, brick, located as above. Mr. Homer has been settling up the business of his predecessors, and has not done as large a business as he intends to for the years to come. His business for one year amounted to $250,000.

GOSNOLD MILLS, 134 Ray street, was incorporated 1855; capital, $100,000. James D. Thompson, president and treasurer; J. W. Kingsbury, agent; William W. Webb, secretary. The rolling mill is 260x85, to which is attached a wing built in the winter of 1868-9, 60x90 feet, which enlarges the capacity of the works one-third. The office is 25x35 feet, 2 stories. They run 7 furnaces, 5 engines, with a combined force of 650 horse. Employ 70 persons, and produce 4,000 tons of band and hoop iron and shoe shapes annually.

BIRD & GREENE, 92 South Water street, commenced the manufacturing of castings, stoves, furnaces and ranges, in 1868, as successors to Wm. E. Bird, who conducted the business at Keith station on the Old Colony and Newport Railroad, removing here in June, 1868. Their main building is 49x130, with addition 25x49, used as a foundry, two 2 story buildings 60x22 each, used for wire dressing, fitting pattern shop and office. They employ 45 persons, melt 40 tons of iron daily, and do a business of $75,000. They make many castings for Moses Pond & Co., Boston, Mass.

J. H. DENNISON & Co. commenced the manufacture of flour, meal, &c., at 42 South Water st., in 1858. The building is 86x65, three stories, built of wood; store house 63x123, three stories. They have three run of stone, employ 12 persons, and produce 50 barrels of flour and sell 300 bush-

els of corn and meal daily; doing a business of $300,000 per annum. An 80 horse power engine, built by Lawrence Machine Co., supplies the power.

THE NEW BEDFORD CORDAGE CO. was organized in 1841, with a capital of $75,000. Wm. J. Rotch, President; L. A. Plummer, Treasurer. Office, Rotch's square; factory on Court street, corner Emerson. The main building is 1,200 feet long, ¼ of it two stories, the rest one story. The works comprise seven buildings, covering four acres. A 150 horse power Corliss engine supplies the power. They employ 150 persons.

WM. G. LAMB commenced the manufacture of bench planes Sept. 20th, 1868. He occupies lower floor of building 50x70, on South Water. Employs four persons and produces 30 planes daily.

OTIS A. SISSON commenced the manufacture of soap in Feb. 1868, as successor to Sisson & Covell, who established the business in 1865. The building is 74x46, 2 stories, built of stone; employing 11 persons and producing 45,000 pounds of soap per month. In addition to the manufacture of soap he deals quite extensively in oil. Doing a business of $100,000 per year.

"U. S. S., that's General Grant,
The man who never said I can't,
And U. S. S. means Use Sisson's Soap,
The washer woman's only hope."

G. L. BROWNELL commenced the manufacture of carriages in 1845. He employs 50 persons and turns out 300 carriages yearly.

The building was originally a two and a half story structure, of stone masonry, and is located on the corner of Third and Cannon streets, in a business portion of the city. The main building is 100x50 feet. To this has been made an addition, which extends from the main structure a distance of one hundred and thirty feet on Cannon street, is thirty feet width and two stories, besides the attic, in height. There is also a second wing about half the size of that first mentioned. The whole building covers an area of 11,160 feet, and in architecture it is of a not displeasing and eminently substantial nature. The interior is finished in a neat manner and is divided into a dozen or more rooms; to which the various departments and subdivisions of carriage manufacture properly assigned. The building is lighted in the day time through numerous windows, and by night with innumerable gas jets. Convenience was evidently consulted in all the appointments and the numerous alterations of the interior.

ANDREW CRAIGIE occupies a building at No. 103 North Water street, 110x25 feet, 2 stories, and casting shop, 60x25 feet, 1 story, for the manufacture of brass castings. Employs 6 persons, and does a business amounting to $20,000 per annum.

HUMPHREY & KIRBY employ 3 persons manufacturing paint and colors at foot of Wall street.

THE PETROLEUM AND COAL OIL CO., established in spring of 1860; have a capacity for distilling and refining 300 bbls. of petroleum per week, being one of the first factories established in the country for the express purpose of refining petroleum. The products of the factories are benzine or naptha, superior burning oil, winter pressed lubricating oil, and crude petroleum. Weston Howland, treasurer.

MORSE TWIST, DRILL AND MACHINE CO. E. S. Taber, president and treasurer; Wm. J. Goulding, superintendent. Sole manufacturers of Morse's patent, straight lip, increase twist drills and Broch's patent self centering chuck and fluted hard reamers. Tools all made by Whitcomb's well-known standard guages.

NEWBURYPORT,

36 miles from Boston and 72 from Portland, Maine, a city on the Eastern Railroad. This is considered one of the most beautiful places in New England. It lies on a gentle declivity on the south bank of the Merrimac, at the union of that river with the ocean. Newburyport was granted a charter May 14th, 1851, and accepted June 6th of the same year.

It contains 26 schools, viz.: 1 high, 4 male grammar, 5 female grammar, 7 male primary, 6 female primary, 1 mixed primary, 1 mixed grammar and primary, and 1 Putnam free school, consolidated with the Brown and female high schools.

There are 19 churches, as follows: 3 Episcopalian, 1 Unitarian, 2 Presbyterian, 5 Congregational, 2 Baptist, 1 Universalist, 1 Christian, 1 Second Advent, 1 Roman Catholic, and 1 Society of Progressive Spiritualists.

The Mechanics' National Bank, 51 State street, was chartered as a State bank in 1812; organized as a national bank in 1864; capital, $250,000. Merchants' National Bank, 61 State street, chartered as a State bank in 1831; organized as a national bank 1865; capital, $1,200,000. Ocean National Bank, 19 Market square, chartered as a State bank 1833; organized as a national bank 1865; capital, $150,000. First National Bank, 16 State street, organized February 22, 1864; capital $300,000. There is an Institution for Savings, incorporated 1820; amount of deposites $2,500,000; office 59 State street. The Newburyport Five Cents Savings Bank, 53 State street; Custom House, 34 Water street; Post Office, 38 State street; Putnam Free School, High, corner Green streets; Jail, Auburn, corner Vernon streets; Court House, High street; Brown High School, opposite 132 State street; Female High School, Washington, corner Court streets; the Newburyport Mutual Fire Insurance Co.; Merchants' Mutual Marine Insurance Co., capital $100,000; The City Hall, Brown's square; Market Hall, No. 1 Market square; Phœnix Hall, 20 State street; Concert Hall, 14 State street; Morse's Hall, 29 Summer street; Masonic Hall, Essex, corner State streets; Odd Fellows' Hall, 89 State street; Library Building, 92 State street; City Market, Market square, are the principal institutions and public buildings.

MANUFACTURERS.

THE PEABODY MILLS, on Federal street, were incorporated January 1st, 1868, with a capital of $200,000. Henry Rice is president, David Ballou, treasurer; Denny, Poor & Co., agents, Nos. 21 and 23 White street, New York City. The buildings occupied by them are of brick, and as follows:—A 4 story mill, 50x308 feet, containing 16,576 spindles and 384 looms. In this building they employ 300 hands in the manufacture of print cloth and sheetings, consuming 10,500 lbs. of cotton, and turning out 86,000 yards per week. They also occupy a 1 story building, 62x93 feet, used as a boiler house; a building with 2 stories and a basement, 50x67 feet, used as a storehouse, with a number of out buildings used as offices, cloth rooms, blacksmith shop, coal sheds, &c., the whole covering an area of about 83,000 square feet. Their motive power is supplied by a Corliss beam engine, of 350 horse power, with 10 flue boilers of 400 horse power combined, built by the Corliss Steam Engine Company, of Providence, R. I.

THE BARTLETT STEAM MILLS, located on Pleasant street, were incorporated in 1838, with a capital of $350,000. Wm. Graves is president, and John Balch treasurer and agent. Frothingham & Co., Franklin, street, Boston, Mass., and Worth street, New York, are the agents. They employ 300 hands in the manufacture of shirtings and sheetings, using about 600,000 lbs. of cotton, and making 2¼ millions yards per year. The number of spindles used is

17,500, and the number of looms is 370. Their power is supplied by an engine of 100 horse power, and 1 of 75 horse power, built by the Corliss Steam Engine Company, of Providence, R. I., with 12 cylinder boilers, built by Bancroft & Clark. The buildings which they occupy are mostly of brick, and are as follows:—a 5 story mill, 50x200 feet; a 4 story mill, 50x150 feet; a 3 story building, 54x84 feet, used as an engine and boiler house and picker rooms, and a 1 story building, 45x81 feet, used as a store house.

Todd & Brown occupy a 2 story wooden building, 21x71 feet, located No. 87 Water street, for the manufacture of pumps and blocks; commenced business in 1864. They run an engine of 15 horse power, with a tubular boiler of 15 horse power, built by the Swamscot Machine Co., of South New Market, N. H.

A. Stanwood & Co. occupy two wooden buildings, two stories, 20x56 feet, and 1½ stories, 25x36 feet, respectively, located No. 19 Liberty street, for the manufacture of soap and candles. Commenced business in 1864. Employ four hands. Their power is supplied by an engine of two horse power.

Henry T. Moody occupies a wooden building 35x50 feet, located No. 40 Water street, for the manufacture of windlass levers, cranks, machine work, and patent car shackles, and patent counter boring auger. He commenced business in 1857; employs 6 hands, and does a business to the amount of $10,000 per year.

Wm. S. Coffin, manufacturer of barrels, casks, &c., occupies a two story wooden building 30x200 feet; also, a one story brick building 28x45 feet, located on Johnson's wharf. He commenced business in 1868; employs from 40 to 50 hands. His machinery is driven by an engine of 20 horse power, built by H. M. Payne, of Newburyport, Mass., with a tubular boiler of 50 horse power, built in Boston, Mass.

H. T. Crofoot, paper box manufacturer, occupies 1 floor of a three story brick building 35x90 feet, located No. 57 State street. Commenced business in 1867; employs 18 hands, consumes 40 tons of straw board per year, does business amounting to $12,000.

Wm. E. Crocket occupies a two story brick building 22x30 feet, with an ell used as an engine house, located at No. 114 Merrimac street. He employs six hands, in the manufacture of leather belting. Commenced business in 1854, and does business amounting to $10,000 per year. His machinery is run by an engine of three horse power.

Geo. A. Cheney occupies one floor of a two story wooden building 40x44 feet, located in the rear of No. 88 State street, for the manufacture of photograph machinery, card cutters, presses, &c. The machinery, consisting of planers, lathes, drills, &c., is driven by an engine of 12 horse power, built by the Swamscot Machine Co., of South New Market, N. H.

Carr, Brown & Co. occupy a 3 story brick building, 43x43 feet, with an ell, 30x30 feet, and two 2 story wooden buildings, 30x45 feet, and 22x30 feet respectively, located on Fair and Pike streets, for the manufacture of horn combs. Employ 75 hands, consume 1,250,000 horns per year, manufacture 800 dozen combs per day, and do a business of $150,000 per annum. Their machinery is run by an engine of 60 horse power, built by the Corliss Steam Engine Company, of Providence, R. I., with 2 flue boilers of 40 horse power each, built by the Swamscot Machine Company, of South New Market, N. H.

The Vulcanized Wood Co. occupy a 2 story wooden building, 30x45 feet, located on Pike street, for the manufacture of useful and ornamental articles from wood dust. Carr, Brown & Co., proprietor. Established 1868.

The Ocean Steam Mills occupy a 5 story brick mill, 358x50 feet, store house, 1 story, 40x80 feet, office, 75x36 feet, located on Monroe street, for the manufacture of printing cloths and fine sheetings. Incorporated in 1845; capital $360,000; number of shares, 3,600; par value of shares, $100. Employ 350 hands. The machinery consists of 20,000 spindles, 450 looms, is driven by a steam engine, 350 horse power, Corliss pattern, of Providence, R. I., with 2 tubular boilers, built by Swamscot Machine Company, and 3 flue boilers built by Moses Tufts, Boston. Consume 30 bales of cotton per week, and 1,000 tons of coal per year. Turn out 3,000,000 yards of cloth per year.

Charles S. Brown occupies a brick building, 4 stories, 100x40 feet, ell, 30x75 feet, located at 218 Merrimac street, for the manufacture of fire arms of every description; commenced business in 1867. Employs 25 hands, has a capacity for 200; run a steam engine 40 horse power, built by Brown of Fitchburg, Mass; 1 Harrison boiler, built in Philadelphia, Penn.; does a business of $25,000 per annum.

A. & D. J. Caldwell occupy a 1 story wooden building 100x40 feet; warehouse 25x25 feet, located on Merrimac st. for the manufacture of rum. The business was commenced by Alexander Caldwell 1790, under present firm 1859. They employ 2 hands. Their machinery is driven by an engine 5 horse power, built by F. W. Bird, of East Boston; 1 tubular boiler built by same firm. Consume 480 gallons of molasses per day, and turn out 420 gallons of rum per day. Do a business of $150,000 per annum.

T. W. & C. H. Derochmont occupy a 2 story wooden building 60x30 feet, located at 212 Merrimac street, for the manufacture of brass work of every description. Commenced business in 1868; employ 10 hands; consume 3,000 lbs. of brass per month, do a business amounting to $10,000 per annum.

The Merrimac Brewery, George Giles, proprietor, occupies a 4 story brick building. Brewery and malt house 110x60 feet, L 20 x 20 feet, located on Forrester street, for the manufacture of ale and porter. Commenced business in 1864; employs 8 hands. Machinery is driven by a steam engine 10 horse power, built in Boston, with 1 flue boiler 50 horse power, built by McKay & Aldus of East Boston, Mass. They consume 400 bushels of malt and turns out 200 barrels of ale and porter per week. Does a business of $75,000 per annum.

J. T. Rowe occupies a 2 story wooden building 44x22 ft. located at 287 High street, for the manufacture of boots and shoes. Commenced business in 1856; employs 45 hands, turns out 20 cases per month, runs 10 stitching machines, consumes 620 yards of lasting per month, does a business of $15,000 per annum.

D. T. Batchelder occupies a two story wooden building 25x40 feet, located at 140 Merrimac street for the manufacture of men's, women's and children's boots. Commenced business in 1864. Employ 7 hands; run 2 Howe stitching machines; turn out 40 pair of boots per week; does a business amounting to $20,000 per annum.

Albert Russell occupies a four story brick building, covering one acre of ground, located at 103 Merrimac street for the manufacture of Russell's patent ship pumps, windlass purchases and other ship machinery. Commenced business in 1838. Employs 19 hands; runs an engine of 20 horse power, built by E. Leslie of Newburyport, with 1 flue boiler, built by Joseph Haslem of Salem, Mass. Consumes 2 tons of iron per day and 250 tons of coal per year, and does a business of $50,000 per year.

E. K. Batchelder occupies a two story wooden building 20x40 feet, located at 314 High street for the manufacture

of ladies' boots. Commenced business in 1862. Employs 15 to 20 hands; runs 4 of Howe's stitching machines; consumes about $2,000 worth of sole leather per year; turns out 100 cases of boots per year; does a business of $10,000 per annum.

JOSEPH ALLEY occupies a two story wood building 30x16 feet, located on Congress street for the manufacture of reed pipes for organs. Commenced business in 1828. Employs two hands.

E. P. DODGE & Co., manufacturers of ladies', misses' and children's fine sewed shoes. The present firm commenced business Feb. 15th, 1869. They are the successors of Dodge & Danforth, who did a business of $50,000 last year. They occupy the second and third stories of a building 58x38 feet. They employ 40 men, and their machines are run by foot power.

J. D. PIKE & Co. established in 1863 the manufacture of ladies', misses' and children's hand and machine sewed Congress, Polish and button boots. Employ from 150 to 200 hands, and doing a business of $200,000 per year.

NEW LENOX, or Deweys' Station, situated on the Housatonic river, 4 miles from Pittsfield, 106 from Bridgeport and 65 from New York, on the Housatonic Railroad; the population is about two hundred.

IN 1847, James Hutchinson in connection with Orrin Hutchinson and Lewis Smith, commenced the burning of lime, under the name of HUTCHINSON & SMITH. They were the first parties who commenced to barrel the lime, previously it had been sold and delivered in bulk. In 1852 Orrin Hutchinson, withdrew from the firm, and the business was carried on by Messrs J. H. & L. S., until 1854, when James Hutchinson bought Lewis Smith out, and has since carried on business alone. His works are situated about one mile from the depot. He has two kilns with a capacity of burning 650 barrels each.

The store house 30x30 feet, one story, and cooper shop 18x26 feet, two stories, are situated near his kilns. His saw mill situated about half a mile north is 30x40 feet, one story. His motive power is furnished by a 20 inch turbine wheel, Leffel's pattern, 16 horse power. He saws out stock enough in one day to make 150 lime casks; employs 11 hands and consumes about 900 cords wood per year; turns out 6,000 casks of lime on an average annually.

ORIN HUTCHINSON, lime manufacturer, commenced business about 18 years ago, and is chiefly engaged in the manufacture of lime. He has a barrel factory for getting out his material for barrels, with one of Wood & Mann's 30 horse power portable engines, (made at Utica, N. Y.,) which furnishes the motive power. He burns about 18,000 barrels of lime yearly. He uses 2,000 cords of wood to burn said lime. Wood costs about $4.50 per cord. The lime sells for $2.10 per cask. The average number of employees is 30.

NEWTON CENTRE. One of the prettiest villages in Eastern Massachusetts, being principally residents of Boston merchants, situated 8 miles from Boston and 39½ from Woonsocket, on the Woonsocket Division of the Boston, Hartford and Erie Railroad, containing about 2,000 inhabitants and 4 churches.

NEWTON CORNER, 7 miles from Boston and 37 from Worcester, a station in the town of Newton, on the Boston and Albany Railroad.

DENNISON & Co., office 66 Milk street, Boston, occupy 2 floors in 3 story wooden building 45x80 feet, for the manufacture of jewellers' and druggists' paper boxes; employ 50 hands and turn out 100 gross per day.

E. A. SMALLWOOD occupies a 3 story wooden building 40 x90 feet, located on Moore street, for the manufacture of furniture, parlor suits a speciality; employs 20 hands; machinery consists of 3 jig saws, 3 saw tables, 1 irregular moulding machine, turning lathe, Daniel's wheel planer and 2 boring machines. The power supplied by a 20 horse power steam engine, with tubular boiler, built by Campbell, Whittier & Co. Ware rooms, corner Beach and Lincoln streets, Boston, Mass.

THE DALBY MILLS were incorporated in Feb. 1865, with a capital of $200,000. They manufacture all kinds of hosiery, yarn, cardigan jackets and all wool under garments. They employ 200 hands, running 8 sets of cards and consuming 1,000 lbs. of wool daily. The power is derived from two 50 horse power boilers, having 48 tubes each. They occupy a factory wareroom and shop, engine room and dye house. Thos. Dalby, agent, O. H. Sampson & Co., Boston and New York, selling agents, Wm. S. Whitwell, Boston, Treasurer.

NEWTON LOWER FALLS, 12 miles from Bostou and 32 from Worcester, a village in the town of Newton and at the terminus of the Newton Lower Falls Branch from Riverside, one mile.

DUDLEY HOSIERY Co. established business in 1866. They occupy, for the manufacture of merino shirts and drawers, the following buildings: main building 80x120 feet with an L 30 feet square, and out buildings, consisting of dye and dry house, sulphur, picker and waste houses. Employ 70 hands and turn out 20 dozen shirts and drawers per day. The power is furnished from 2 turbine water wheels, 1 Warren and the other built by the American Water Wheel Co. The two together making a total of 50 horse power. They also have, to be used in case of a deficiency of water, an upright steam engine of 30 horse power.

EATON, MOULTON & Co. occupy a two story stone building 32x80 feet, a wood working shop 25x45 feet, store house 27x54 feet, forge building 18x25 feet, for the manufacture of paper machinery. Employ 30 hands, and do a business of $60,000 per anum. They have, to run their machinery, a breast water wheel 16 feet in diameter, 5 feet long, also, a 12 horse power steam engine, one 2 flue boiler 16 feet long, 42 inches diameter, made by Holden & Gallegan, of East Boston, Mass.

LEMUEL CREHORE established business in 1826. He occupies a two story wooden building 28x80 feet with two wings 27x36 and 20x55 feet respectively, for the manufacture of paper. Employ 12 hands. The motive power to run his machinery, is supplied by 1 breast and 2 Blake water wheels.

THOS. RICE, JR. commenced business in 1834. He occupies a two story wooden building 80x100 feet, also a 1½ story wooden building 70x80 feet for the manufacture of book and news paper. Employs 28 hands, and produces from 46 to 48 tons paper monthly. His machinery is driven mostly by 3 Blake and 3 Russell water wheels, making 130 horse power; but in case of a deficiency of water, he has 3 steam engines of 50 horse power each, to help out. Mr. Rice's capacity is 10 engines and 2 Fourdrinier machines.

NEWTON UPPER FALLS, situated on the Charles river, in the town of Newton, 10 miles from Boston, 27½ from Woonsocket, and 43½

THOMAS RICE, JR.,

Manufacturer of all kinds of

BOOK AND NEWS PAPER,

NEWTON LOWER FALLS, ... Massachusetts.

from Providence, on the Woonsocket division of the Boston, Hartford and Erie Railroad. A village of 1,200 inhabitants and contains three churches.

THE NEWTON IRON WORKS, F. Barden, proprietor, is situated about three-quarters of a mile from the depot. He occupies a one story building for the rolling of iron, reducing Norway iron to shapes and rods. He commenced business in 1848: now employs 40 hands. The business is done for parties in Boston and other cities, who send their stock to him to be rolled. The motive power is furnished by a 72 inch turbine wheel of 60 horse power. He usually rolls about 2,500 tons per year.

OTIS PETTEE & Co., established in 1831, for the manufacture of cotton machinery, iron castings, &c. This firm occupy buildings, the dimensions and name are as follows:

No. 1, 196x60, three stories, machine shop; No. 2, 140 x30, one story, blacksmiths' shop; No. 3, 50x20, one story, boiler house, containing a tubular boiler, made by Allen & Endicott, and a steam fire pump; No. 4, 140x40, one and two stories, foundry—the second story, part used for paint shop; No. 5, 100x30, three stories, setting up shop; No. 6, 150x50, two stories, rented to the railroad for repair shop.

This firm employ 200 hands, and use about 15 tons pig iron per week, and 45 tons bar iron and steel, and turn out on an average, 100 speeders, 300 cards, and 100 looms per year.

In the basement of the machine shop, they have a 30 horse power engine, built by Campbell, Whittier & Co., and in the blacksmiths' shop, a two foot turbine wheel of 25 horse power.

NEWTONVILLE, 8 miles from Boston, and 36 from Worcester, a station in the town of Newton, on the Boston and Albany Railroad.

WM. FREEMAN & Co. commenced business in 1848, on the opposite side of the Charles river, from the Ætna Mill. Messrs. F. & Co. manufacture dye stuff. Their buildings, with the necessary yard room, are built of brick, mostly 2 stories high, covering about 18,000 square feet of ground. They employ 20 hands, and turn out about 60 tons dye stuff per week. The motive power is furnished by a 50 and 25 horse turbine wheel, with 4½ feet fall.

SILVER LAKE MANUFACTURING CO. This company was incorporated in 1866, with a capital of $200,000. The officers are—H. W. Wellington, president; Charles Scott, treasurer; and Wm. J. Towne, agent; for the manufacture of patent steam packing and solid braided cords, &c., &c. This company have built a fine brick building, 5 stories high, 50x100 feet inside, with 2 towers, one in front for entrance to mill, the other in the rear for wash room, with hot and cold water, clock room, &c.

Their engine house, 25x20 feet, 1 story, containing a 50 horse power engine, by Geo. W. Rawson & Co., builders, of Cambridgeport. The boiler house, which is attached to main building by the engine house, is 43x27 feet, 1 story, and contains two tubular boilers, made by Kendall & Roberts, which furnishes steam for the engine and to heat the building.

Their machinery consists of 8 machines for making steam packing, from ¼ to 2 inches in diameter, and 9 machines for braiding covering, of which they turn out about 150 tons per year.

They also have 3 spoolers and 100 braiding machines for making picture cords, fishing lines, &c., &c. On these machines they can braid from the finest silk fishing lines to ⅜ inch frame cord.

This company have a way of covering copper wire for picture cords, so in case the moths eat the first and even second covering, which is cotton braided over the wire, there is no danger of the pictures being damaged by their coming in contact with the floor sooner than at the option of the owners, thereby saving the owners many times considerable expense.

NORTH ABINGTON, 18 miles from Boston, on the Old Colony & Newport Railroad, a village in the town of Abington. Has 2 or 3 churches and several boot and shoe manufactories.

DAMON, THOMAS & LEWIS, 57 Hanover street, Boston,—manufactory here. W. S. Wales, Agent. The main building is 57 x 28, 3 stories, with L 50 x 25, 2 stories. They manufacture men's and boys' boots and shoes; employ 60 persons, produce 3,600 cases and do a business of $130,000 per year.

C. M. WALES occupies a medium size 2½ story building, for the bottoming of boots for other parties. He employs 40 persons, and bottoms 18 cases per day.

M. N. ARNOLD commenced the manufacture of men's and boys' boots and shoes in June, 1867. He occupies 3 buildings; employs 60 persons, produces 80 cases per week, mostly boots, and does a business of $150,000 per year.

J. S. HOWARD commenced the manufacture of men's and boys' boots and shoes in July, 1868, having removed here from North Bridgewater, where he carried on the business some 18 years. Employs 15 persons and produces 6 cases per week.

WM. E. LYON established business in 1867. He occupies a 2 story building 28x30 feet, for the manufacture of men's lasting brogans; employs 8 men, turns out 48 or 50 pairs per day, and does a business of about $5,000 per annum.

NORTH ADAMS, 53 miles from Albany, 48 from Troy and 20 from Pittsfield, a village in the town of Adams, on the Pittsfield and North Adams Railroad, at the foot of the Green Mountains, a very enterprising and rapidly growing place. The Boston and Troy Railroad runs from this place to Troy. It is on the direct route from Boston to the west. Has a population of about 9,000 inhabitants, 6 churches, newspaper, 1 National and 1 Savings Bank.

W. W. FREEMAN & Co. This firm, the largest manufactures of cotton cloth in North Adams, commenced business in 1864. They run 3 mills and print works.

The Eagle Mill 135x61, 4 stories, built of brick, is situated on Eagle street, about half mile from the depot,

with wing 30x60, 3 stories, used for wheel house, second story dresser and third story for picker and laper rooms. Their engine and boiler house is detached from main building 25x60, 2 stories, containing an 80 horse power engine and 2 tubular boilers made by Campbell, Whittier & Co. of Boston; on the second floor is their cotton room. Their motive power principally is derived from a 75 horse power overshot wheel, though very often as is the case this way they have to call in use their engine. They use about 7,000 lbs. cotton, turning out 50,000 yards print cloth per week; running 10,000 spindles; employ 125 hands.

At the Estee Mills, where they do nothing but spin, they employ 50 hands, using 6,000 lbs. cotton for weekly production. This mill is 160x40, 3 stories; motive power derived from 50 horse power overshot wheel, 23 feet diameter, 19 feet bucket, also 30 horse power engine, with tubular boiler built by Campbell, Whittier & Co.

The Stone Mill is where all the weaving is done, is 100x 50, 4 stories, and contains 166 looms, employing 45 hands, turning out 40,000 yards per week. They use at this mill for motive power 50 horse overshot wheel 16x17 feet.

Freeman & Co.'s Print Works, built of brick, is situated back of the Eagle Mill. The main building is 40x80, three stories. On the first floor is the finishing room, second floor engraving and aging, and on the third floor aging. No. 2, 30x70, 3 stories, on the first floor is their machine room, containing 3 machines for printing, also shearing room, second and third floors for drying rooms. No. 3, 40x60, 2 stories, boiler house and color shop. The boilers are 6 tubular, built by Campbell, Whittier & Co. No. 4, 40x200, 1 story dye house and bleach house. No. 5, 25x30, 1 story bleach house. No. 6, 25x50, 1 story drug house. No. 7, 30x30, drug house 1 story, and Nos. 8, 9 and 10, 150x30, 2 stories each, drysheds; employing 82 hands and printing 189,000 yards per week, or 4,200 pieces. The Freeman & Co.'s prints are considered the best of the grade, (56x60) in the market. They have all of the modern improvements known to the trade, either in this country or in Europe.

C. O. Hall commenced business in 1866, burning brick; employs 27 hands, and turns out about 1,300,000 bricks per year.

Cady Bros. They occupy a 3 story building 80x20, for the manufacture of ladies', misses and children shoes; employing 50 hands. Their works is filled with machinery for the making of shoes, driven by an 8 horse steam engine, tubular boiler. They turn out 40 cases shoes per week.

R. R. Andrews commenced business in 1857, for the manufacture of brown sheetings in a 4 story building 36x80, lean roof 36x14. Employs 40 hands and turns out 11,000 yards cloth per week. The number of spindles run 7,000. The motive power is furnished from a 40 horse Parker wheel.

Millard & Whitman commenced the manufacturing of ladies' shoes in 1866, in a 3 story brick building 38 x 100. Employ 70 hands. Their works is filled with machinery driven by a 15 horse power engine, tubular boiler, made by Wm. Contie, of Troy. They turn out 55 cases of shoes per week.

C. T. Sampson commenced business in 1858 for the manufacture of women's and misses' shoes, occupying a 3 story building 90 x 60, employing 180 hands. The work is done mostly by machinery, driven by 10 horse power engine, made by D. A. Woodbury & Co., Rochester, N. Y.,—tubular boiler. They run 30 sewing machines, driven by this engine, beside pegging machines and other kinds of machinery; turn out 100 cases per week.

Arnold's Print Works, established in 1863, by Harvey Arnold & Co., in the northern part of the place, about half a mile from depot. The buildings, 9 in number, with their yard room, cover nearly 6 acres of ground. The names and dimensions are as follows: No. 1, main building, 45x172, 3 stories and basement, built of brick with slate roof. In the basement is the machine shop, on the first floor is the packing room, office and machine room, with 4 printing machines; second floor is the engraving and aging room, and third floor aging room. No. 2, 45x200, 1 story, wood, bleach and dye house. No. 3, 23 x 100, 2 stories, wood, dry shed. No. 4, 23x100, 2 stories, wood, dry shed. No. 5, 23x100, 2 stories, wood, dry shed. No. 6, 30 x 75, 1 story, wood, drug house. No. 7, 40x150, 1 story, wood, color shop, boiler house and storage for coal, containing 8 tubular boilers, made by Campbell, Whittier & Co. No. 8, 30x40, 1 story, brick, singe house. No. 9, 30 x 80, 1 story, wood, drying can house.

This company employ 100 persons, and print 6,000 pieces, or 270,00 yards per week.

The motive power is derived from 3 steam engines, making 150 horse power. The engines were built by Campbell, Whittier & Co., of Boston. These engines are set in different parts of the works, the larger engine being in the main building; another in the singe house, and the third in the drying room. The printing machines are driven by separate donkey engines, made by Campbell, Whittier & Co., of Boston.

Parker Bros. commenced business in 1868 for the manufacture of shoes. Building 24 x 30, 3 stories; employ 50 hands, and turn out 30 cases per week. Use for driving their sewing machines, &c., a 6 horse engine, with tubular boiler.

North Adams Woolen Co., incorporated in 1863, with a capital of $200,000; the officers of the company, are, J. Blackinton, president; W. S. Blackinton, treasurer; G. B. Perry, agent, and George French, superintendent, for the manufacture of woolen cassimeres. Their mill was built just before the close of the war, with the intention of running 16 sets of woolen machinery, but the war closing and business being dull they only put in nine sets. The main building is 225x56 feet, four stories, wing 40x138, three stories, used for picker, boiler and dye house; employ 150 hands. The amount of wool used per day is 1,600 pounds in grease. turning out from 1,000 to 1,200 yards cloth daily. The motive power is furnished from two turbine wheels of 150 horse power combined; they use two tubular boilers made by Kilburn & Rice, of Pittsfield, Mass.

S. Johnson commenced business in 1850 for the manufacture of cotton warp, in a three story and attic brick and stone building 42x135 feet; picker house 32x32 feet, two stories, boiler house and dry house 30x60 feet, two stories; carpentering shop 24x50 feet, one story; cotton-house 30x 100 feet two stories; dye-house attached to main building, 50x36 feet, one story; employ 80 hands, turning out 7,000 yards warp per day.

The motive power of this work is furnished by a 60 horse power overshot wheel, also a 60 horse power engine with two tubular boilers.

S. W. Brayton & Co., commenced the manufacturing of woolen cassimeres in 1862. Their mill has four sets; employing 80 hands, and use about 2,500 pounds of wool per week, turning out about 30,000 yards per month.

Motive power derived from an overshot wheel. They use a tubular boiler made by Campbell, Whittier & Company, of Boston.

Messrs. Arnolds & Ray commenced the manufacturing of 56x60 print cloths in 1863. The business was established by James E. Marshall, in 1838. Their main building, 133-x45 feet, two stories and basement with boiler-house attached 20x30 feet, one story, containing two flue boilers

built by Campbell, Whittier & Co. This company runs 3,792 spindles, consuming 3,150 pounds of cotton, and turning out 24,000 yards cloth per week; employ 81 hands. Motive power from two turbine wheels of 65 horse power combind.

JAMES HUNTER & SON commenced business in 1858. The business, iron founders and machinists, was commenced by Hunter & Witherbee in 1850. The buildings, 8 in number, are as follows:—No. 1, main building, 50x95 feet, 2 stories, built of wood, is the machine shop; No. 2, 100 x50 feet, 1 story, built of brick, foundry; No. 3, 60x40 feet, 1 story, casting and cleaning shop; No. 4, 36x22 feet, 1 story, blacksmiths' shop; Nos. 5 and 6, pattern shops, 30 x20 feet, 2 stories each; Nos. 7 and 8, office and store. They employ 35 hands, using 10 tons of iron to produce a monthly product. Their motive power consists of a 30 horse power steam engine built by themselves, with tubular boiler, built by A. Laug, of Pittsfield, Mass.

GLEN WOOLEN CO., W. S. Blackinton, treasurer, was organized in 1868; established by Perry & Penniman in 1861, for the manufacture of woolen goods. This mill has the capacity for 6 sets of machinery, but at present is not running but 3. The main building is 45x100, ell 60x25 feet, 4 stories. The dye house in the rear is 30x40 feet, 1 story; the picker house is 26x60 feet, 1 story; wool house, 24x30, 2 stories, the first floor being used for carpenters' shop; office, 15x20. Employs 75 hands, and turn out 14,000 yards cloth per month. Motive power is furnished by both water and steam, the water power being a 35 horse power turbine wheel, and the engine is of 25 horse power, built by James Hunter & Son, of North Adams; 2 tubular boilers, made by Pratt, of Boston.

TYLER & BLISS organized in 1863 for the manufacture of woolen cassimeres. The business was established by Ingalls & Wells in 1832. The main building is 126x50 feet, 3 stories; the sorting room or wool house is 30x60 feet, 2 stories; dye house, 150x26, 1 story; picker building, 30x 40 feet, 1 story; the boiler house, connected to main building, is 50x25 feet, 1 story. They have 2 tubular boilers made by Campbell, Whittier & Co. Their motive power being furnished by a 30 horse power steam engine; also an 18x18 feet overshot wheel. Employ 125 hands. Their machinery consists of 9 sets woolen cards, with the requisite number of looms, jacks, &c., &c., using 1,000 pounds wool per day, and turning out from 25,000 to 30,000 yards cloth.

A. P. BUTLER & Co. commenced the manufacture of belt, card, harness and shoe leather in 1864. Their main building is 115x32 feet, 2 stories. The beam room is 60x32 feet, 2 stories; wool house, 24x50, 2 stories. Messrs. B. & Co. also pull wool and manufacture sheep skins. They employ 8 hands, and turn out on an average 120 sides leather per week, and 5,000 sheep skins and 3,000 calf skins per year, using 250 cords bark, and a considerable quantity of oil and tallow. They use a 20 horse power steam engine with tubular boiler for motive power.

BRIGGS BROS. commenced business in 1863 for the manufacture of fancy cassimeres, running 6 sets woolen machinery, employing 100 hands, and producing 800 yards per week. The machinery is driven by a 150 horse power engine. This firm do a business of $250,000 per year.

NORTH AMHERST, 88 miles from New London and 12 from Grout's Corner, now Miller's Falls; a station in the town of Amherst, Hampshire county, on the New London Northern Railroad.

NORTHAMPTON, 17 miles from Springfield and 152 from New York. A village and town on the Connecticut River Railroad, and New Haven and Northampton Railroad. This is a very beautiful town, delightfully situated. The soil is excellent and its products exuberant. The village is delightfully situated on elevated ground, about half a mile from the river. It contains 9 or 10 churches, 3 National and 1 Savings bank, insurance company, 2 newspapers and 3 hotels. Mounts Holyoke and Tom, the former 830 feet, and the latter 1,200 feet above the river, look down upon the village as it lies embosomed in the sylvan shade of the western bank of the Connecticut. The streets are irregularly laid out, the winding avenues and crooked streets, lined with elms and maples, giving it an inviting and picturesque appearance and making it one of the pleasantest towns in the river valley.

It is two miles from Hadley, the retreat of Goff the regicide, its fellow pioneer in the civilization of the valley and its compeer in the early struggles with the savages. Deerfield, the scene of the massacre, is 15 miles to the north. Invalids, seeking health, love the shady retreats about Round Hill. Tourists and lovers of the picturesque, climb Mt. Holyoke and adjacent hills, and angle in the glassy river at their base in summer.

Northampton, the Nonotuck of the Indians, was purchased of the "Ancient Sachems," in year 1653, for 100 fathoms of wampum, ten coats and some smaller gifts, and the ploughing of sixteen acres of land for them on the opposite side of the river. Doubtless, some dusky Cincinnatus had made up his mind to go for modern improvements. We may imagine the satisfied puff-like "ugh" that escaped his lips when he saw the broad deep furrow of the foreign plough for the first time on his own land. Seventeen years before, in the purchase of Springfield, they had stipulated for some farming implements, such as their rude agriculture seemed to require, and the terms of purchase ran thus: eighteen fathoms of wampum, eighteen coats, eighteen hatchets, eighteen hoes and eighteen knives.

One queries naturally, why were hatchets, hoes and knives left out in the purchase of Northampton?

That the Sachem, in some extatic moment, when a vision unfolded the future of the little Mill River, which scarcely the meanest of his tribe would deign to angle in, saw its banks bristling with hatches, hoes and knives, plentier than new gathered grass from the meadows he was about to sell, and lords of them moving down the great river drawn by a fire wagon; (even the urchins with a knife not for fighting, but for eating with,) is taken for granted. Doubtless, he feared a "glut in the market" and would have none of them in the bargain, for they would come in time.

If the vision was true to the letter of the present time, and who will say that the vision was not, he saw that the long white webs from the spindles and looms of the cotton factory made into dickeys would not be quite as warm as good English coats; but would help; so he stipulated for the moderate number of ten, and to be red. Unfortunately, we are in the dark, as to what the smaller gifts were, that are alluded to. But as camel hair shawls would so exactly suit the aboriginal taste, we may safely conclude that the purchasers threw in a half dozen, and though the gratified Indian capers following the gift, still the worthy commissioner's forgot to make a record of it.

The great preponderance of wampum, hath some deep potent in it. Like another Pharoah he had been warned by the vision of a famine in wampum. There was no manufactory on Mill river for that. True the vision must have had Williston's in it, turning out its myriods of buttons. But buttons and bullets have some resemblance and it was difficult for the Indian mind to see how they might be

WILLIAMS MANUFACTURING COMPANY,

Manufacturers of

OAK & RATTAN BASKETS.

CORN, CLOTHES, MARKET,

Oyster, Cotton, Fruit,

And every variety of Baskets used by Manufacturers.

(ESTABLISHED 1850.)

NORTHAMPTON, MASS.

L. B. Williams, President. H. F. Williams, Treasurer.

used for ornaments. Had he asked his wife Wenawee, she would have thrown away the thorn that pinned her blanket and stipulated for a number. The boded scarcity of wampum, (the gold lace and jewels of dusky dignity) weighed on his mind, and he would have a good round one hundred fathoms of the much coveted stuff.

Doubtless, the glittering strings of beads warmed his old heart as much as a diamond bracelet would the heart of the fairest belle in River Valley to-day.

As we have gone through the articles enumerated in the purchase, and found no gowns mentioned for the women, we may certainly conclude that he saw the gingham looms, and the rolling up such piles of fabrics and the sewing silk works, spinning such an interminable thread, and that he concluded that that time was not the most advantageous time to buy in. The bears had the market unquestionably.

For the same reason we conclude that he saw Clark's paper mill, just as it works to-day, turning out white talking paper, floating hither and thither, plenty as the snow flakes in one of his own winter storms, whispering the secrets of his much loved valley, in the ear of the great bay at Boston, and the ocean, and the river, the father of the waters.

As for the Screw Company, he saw it at work, and the busy iron fingers holding each one while the threads were turned. But he had only learned as far as the adage, "hit the nail on the head," and did not know that it would apply equally as well to the new patent screw.

The noisy trip-hammers of the Bay State Cutlery Works, he mistook for a new war dance, and thought there was power in the clatter of the feet of the braves; and he was sure that he could see the sparks, if not the smoke of the council fire. He came near the door and glanced up through the long forge shop and saw, to his amazement, not one fire, as the tribes were wont to have, but many fires, and stranger still, each warrior sternly sat in a ponderous iron chair, swinging about his separate fire like a haunch of venison before one of his own camp fires.

That which he had thought was a new war dance, turned out to be, on a nearer view, huge monsters champing bits of red hot steel, which these strange warriors were constantly filling their mouths. He looked around, there was a long row of them, and so fierce and loud was their tireless champing, that no Sachem's voice could be heard. Every thing had a weird strange look. The firelight fell on pale, silent faces. Not one of these braves were known to him.

Where was he? What tribe's camp was this? Was it the great Medicine man's pow-wow? At last he began to fear that he had really died and gone to the hunting grounds where bad warriors went, and that there might be a vacant fire for him. Would he hang there like a moose, roasting whole? Was he a dead, or a live Indian, he would feel of his scalp, and see if that was all there.

His scalp was surely all right, he must be alive, and in the camp of his enemies, the Mohegans, and these were the English captives in their camp. Ah! that was it, and he would not be able to get all that wampum and those ten red coats. What could he do, so far from his tribe alone; but he resolved that the ghosts of his fathers should never be ashamed of him. He would give a true war whoop and then run the gauntlet till he reached his own hills. His own voice awoke him. He had only just taken a wee drop of fire water, and it was all a dream or rather a vision that had passed before him in sleep, after having talked over with the worthy Commissioners, the preliminaries of the purchase. He found himself in his own lodge and his wife Wenawee with the roasted ground nuts ready for his morning meal.

To banish tropes and figures, the Bay State Hardware Co.'s Works manufacture the American table cutlery, which is stamped River Side Cutlery Co., at a cosy little village called Bay State on Mill river, two miles from Northampton, Mass. The main building is 200 feet long by 40 feet wide and two stories high. A wing 60x40 feet, which is also two stories in height. A second building of the same height and dimensions; an office 32x24 feet and some smaller buildings.

In these buildings, which really have a capacity for about 300 operatives, is an almost endless variety of complicated and powerful machinery, which is capable of turning out 4 or $500,000 worth of the best American cutlery in all the different varieties of finish,—pearl, ivory, bone, ebony and cocoa handles, comprising in all more than 200 sizes. Here men may be seen cutting and forging scores of tons of the very best steel into blades. Scores of tons of grind-stones are whirling to sharpen and brighten them, and scores of emery wheels are buzzing to give a finish and polish. Circular saws are cutting constantly tons of cocoa, ebony, ivory and bone into handles, to which numerous polishing wheels gives the desired finish to make their work compare favorably with any in the world. As the goods are finished, they are transported to Messrs. Sargent & Co., 70 Beekman street, New York, who are the sole agents for the Company.

The works are under the care of E. G. Durant, Esq., as superintendent, and Isaac Stone, Esq., treasurer. Both are men of culture, active and energetic.

Returning to Northampton, we find:—

The Williams Manufacturing Co. which was incorporated 1867, capital $50,000, for the manufacture of baskets of every description from oak, ash and rattan. The business was established in 1850 by L. B. Williams, Esq. The

CHARLES H. BREWSTER,

MANUFACTURER OF

SASH, BLINDS, DOORS & WINDOW FRAMES,

AND DEALER IN WINDOW GLASS.

Particular attention paid to Ground and Cut, Enamelled, Embossed, Flock and Stained Glass. Any pattern furnished to order.

Pleasant Street, Northampton, Mass.

main building is 210 x 40 feet, 3 stories high with basement, another 80x100, and attached are engine room, 70 x 40 feet, storehouses, &c. The 40 horse power engine, made by Brown of Fitchburg, and machinery are new, and all the appointments of the factory are first class. The company now employ 100 hands in their manufactory, turning out 1,500 to 2,000 baskets per day; it is the oldest—having been established nearly 20 years, and the largest concern of the kind in the country, and probably produces at least three quarters of all the peach baskets made in the United States. The factory is in all respects complete and convenient, and the goods turned out are tasteful and beautiful in appearance and of excellent quality and strength. L. B. Williams is president, and H. F. Williams, treasurer of the company.

ARMES & BARDWELL MANUFACTURING CO. This company was incorporated in 1866, with a capital of $80,000, for the manufacture of wallets, portmonnaies, memorandum books, and sole manufacturers of the patent self-closing pocket-books, also manufacture straps and T hinges, wrought butts, washers, &c.

The business was established twenty-five years ago by Dennis ARMS, Esq., in the town of Southfield, and after a number of removals has become permanently settled here, where they have recently erected an attractive 3 story brick building, 144x40 feet, to which are attached 2 wooden buildings used for various purposes.

The present company succeeded Mr. Arms during the year 1866, and are now producing goods to the amount of $200,000 per year, requiring the help of 150 employees.

An engine of 30 horse power, built by Thomas Rawson, of Cambridgeport, furnished with steam from a tubular boiler made by Kendall & Roberts, also of Cambridgeport, is used for driving their machinery. Bardwell & Hotchkiss, Chambers street, New York, are the selling agents.

GREENVILLE MANUFACTURING CO., established in 1846 for the manufacturing of sheetings and drills. J. P. Williston, treasurer, A. L. Williston, secretary. Their works are situated nearest the Florence depot, from which their goods are mostly shipped. They occupy a 4 story building, 120x 42 feet, employ 100 hands, and produce about 1,000,000 yards per year, 36 inch wide sheetings; consume 325,000 pounds cotton. The mill is situated on the bank of the Mill river, the waters of which drive a 30½ inch Leffel wheel under 27½ feet head.

CHARLES H. BREWSTER, manufacturer of sash, doors, blinds and window frames. He occupies the 2 upper stories of a 3 story building 60x60 feet, situated on Pleasant street, employs 13 hands, and runs 16 machines. The business was established about 20 years ago by Abells & Co.

CALEB LOUD & SON, paper manufacturers, occupy a two story building 24 x 52 feet, with an L 44x22. They run 3 Ray engines of about 200 lbs. capacity each, 1 cylinder machine 54 inches wide, steam dryers. Steam boiler 25 horse power. Manufacture white tissue paper and tissue manilla; employ 7 hands; consume about 100 tons stock, and produce 60 tons paper per annum.

CLEMENT & HAWKES MANUFACTURING CO., established in 1866. Occupy a 5 story brick building 150 x 40 feet, and forge shop 120x40 feet, brick. Employ 100 hands, manufacture socket and solid shank hoes, bog and planters' hoes, Barstow & Ingoldsby's patent picks, cast steel and malleable rakes, &c. Their machinery is run by water wheels of 100 horse capacity, under 14 feet fall.

WILLISTON & ARMS MANUFACTURING CO. manufacture all styles of tapes, bindings, webbings, &c., of fine and coarse, bleached and colored yarns. The company was incorporated in 1865, with a capital of $100,000.

This factory is in a fine 2 story brick building near the railroad. The building is 180x60 feet, having a 1 story L built of brick, about 50 x 30 feet. In addition there is a wooden building used for waste 25x30 feet, 1 story.

Number of looms in use 75; 3 spoolers and 2 quillers—and requiring 65 employees. Every week there is made and finished about 3,000 dozen of tape, ranging in width from ¼ inch to 1 inch, and all shades and colors.

An engine of 40 horse power, built by Woodruff & Beach, of Hartford, and 2 tubular boilers, made by Grimes & Ellison, Springfield, furnish the necessary motive power. This company are introducing a new feature in reference to the manner of putting up roll tape. They use an invention which consists of a band of any durable material that clasps around at least two layers of tape, which always keeps the different layers in place and allows the end to remain free, and may be unwound similar to a tape measure, thereby avoiding the unrolling as in the ordinary roll tape. These bands are the exact width of tape, and are marked such a number in 16ths as the tape measures in width.

WILLIAM H. ROBERTSON, manufacturer of ginghams and poplins. Mr. Robertson commenced the present business in the year 1868, during the spring, and manufacturing a nice article of ginghams and poplins, he has placed the Northampton mills' productions where their excellence is well known. The factory is in the Star Factory's fine brick building, which is 150x40 feet, five stories; employees, number at present time, 37, and runs 40 looms, producing 8,000 yards per week. Power is derived from water wheel in Star Factory. Mr. Robertson is constantly making additions to machinery, and is about to increase very much the present capacity.

HORACE LAMB, manufacturer of iron and tinned wire for brooms, brushes, pianos, and card, and fine tinned for weaving; also, annealed and bright wire. In 1850, Mr. Lamb commenced the above buisiness in North Hadley, remaining there for 13 years, then removing to Northampton in 1863, where he carried on the business six years. Ten drawing machines are used, requiring six employees, and using ten tons of iron per month. Two stories, each 30x60 feet, are used at the present time, but additions of about the same size as rooms now in use are soon to be built on the main building.

NORTHAMPTON PEGGING MACHINE CO. This is one of the most novel machines for labor saving we have seen. It is a small hand machine for pegging all kinds of boots and shoes, and weighing but 17 lbs. It can be taken in the hand and held in place, while with one hand a crank is turned and a feed resembling that of a sewing machine, carries the ma-

chine along and all the time driving pegs equally fast as the large and cumbersome power machine used for the last five years. A coil of thin wood is attached to the machine, and at the proper moment a peg is cut, the hole made, and the peg driven, so that it may be said, it makes its own pegs at the same time it drives them, requiring but one minute or less to peg one boot. This company was incorporated in March, 1868, having a capital of $100,000. The factory is in the building owned by Hoe Co., they using one story, 150 x40 feet, and employ 20 hands, and have capacity for turning out 20 machines per day. Use water power, furnished by Hoe Company.

H. Lamb & Co. manufacturers of covered wire of all descriptions. Amount of bonnet wire made per day is about 50 gross. There are ten machines in use. The business was established in 1868 by the same company now having it. Occupy about 100 square feet in building used by Horace Lamb, in the manufacture of various kinds of wire. One turbine wheel furnishes motive power.

Wm. R. Clapp, machinist and founder. Mr. Clapp commenced this business in 1848. There are two brick buildings, the first, being machine shop, which is 60x40 feet, two stories, the second is about the same size, but only one story. Twenty employees are required here, who cast about 8 tons per month. There are in machine shop 10 machines, consisting of lathes, planing machines, drills, &c. A 25 horse power engine, built by Tufts, Boston, and one flue boiler gives necessary power. Mr. C. manufactures circular saw mills, turbine wheels, also, steam engines, planing and matching machines.

North Andover, 28 miles from Boston, a station and town on the Boston and Maine Railroad and at the Junction of the Lawrence Branch, has a population of 1,800 and 3 churches.

N. Stephens & Sons occupy a four story brick mill 40x 140 feet, picker house 1 story 60x30 feet, where they employ 60 hands for the manufacture of woolen flannels. The business was established in 1813, by Nathaniel Stphens the present firm in 1865, there machinery consisting of 6 sets of cards, 13 jacks, 36 looms, is driven by an engine of 40 horse power with 2 tubular boilers built by Swamscot Machine Co. of South Newmarket, N. H. This firm consume 250,000 lbs. of clean wool per year and turn out 1,500 yards of flannel per week; do a business of $250,000 per annum; also have a breast water wheel 18 feet diameter of 50 horse power.

The North Andover Mills, capital $100,000, occupy a three story brick building 150x50 feet, picker house 1 story 30x40 feet, dye and boiler house 50x25 feet, store house 70x40, located in North Andover on the Lawrence Branch of the Eastern Railroad, where they employ 100 hands for the manufacture of woolen flannels. Incorporated in Jan. 1867. Their machinery consisting of 9 set of woolen cards, 50 looms, 17 jacks, is driven by an engine 40 horse power, built by the Putnam Machine Co. of Fitchburg, Mass., with 2 tubular boilers built by same firm, also the machinery is driven by a breast water wheel 24 feet in diameter and 18 feet wide. This company consume 1,000 lbs. of clean wool per day and turn out 25,000 yards of flannel per week, and do a business of $325,000 per annum.

Among the oldest, most successful and extensive manufacturers of woolen machinery in New England, is the firm of Davis & Furber, who commenced the manufacture of the above in 1836, when the manufacturing interests of this country were in their infancy. Of the immense amount of business done and the proportions of their buildings, one can have a faint idea by perusing the following facts and figures. The buildings occupied are as follows, viz.: One four-story brick building, 260 x 50 feet, with an ell attached, 50 x 60 feet; engine and boiler room, 30 x 50 feet, wood; machine shop, 150 x 40 feet, four stories; a factory, 50 x 100 feet, five stories, three of which are used for a machine shop, and the other two for the manufacture of card clothing; a foundry, 100 x 75 feet; pattern house, 70 x 40 feet, and two blacksmith shops, 60 x 60 feet each. The above are located on Main street. Messrs. Davis & Furber employ from 400 to 600 hands, for the manufacture of wool machinery, card clothing, mill shafting, carding machines, with seven or nine patent roll rubber or tube condenser, card grinders, spinning jacks, pickers, dusters, reels, beamers, dressers, spoolers, broad and narrow common looms, drop box looms, and fancy looms, broad and narrow gigs, stocking yarn reels, skein spoolers, bobbin winders, double and single drum twisters, fulling mills, banding, binding machines, and castings of every description. All of the above machines are made with new and improved iron frames, or, if preferred, with wood frames.

Their machinery, consisting of 125 card clothing machines, and other machinery in great variety, is driven by an engine of 75 horse power, built by the Putnam Machine Company, of Fitchburg, Mass., assisted by an engine of 30 horse power, built by Souther & Co., of South Boston. They also use two water wheels of 40 horse power each, with three tubular boilers, built by the Swanscot Machine Co., of South Newmarket, N. H., making in all a total of 185 horse power. They consume about 2½ tons of wrought iron per day, besides other scrap iron, from 10 to 12 tons coal, 1,000,000 feet of lumber per year, and turn out five tons castings, and cut up from 50 to 75 sides of leather daily.

North Ashburnham, 64 miles from Boston, 14 from Fitchburg, and 28 from Keene, a small village in the town of Ashburnham, on the Cheshire Railroad.

North Bellingham, 23¾ miles from Boston and 8¾ from Woonsocket, a country station on the Woonsocket Division of the Boston, Hartford & Erie Railroad.

Rays' Woolen Co. occupy a mill here 90x50, 4 stories and attic, for the manufacture of satinets. They employ 75 persons, run 3 sets. A Swaine turbine 42 inch water wheel runs the mill, the fall being 12 feet, located on Charles river. The daily production is 700 yards. James P. & Joseph G. Ray, proprietors, their office being at Woonsocket.

North Beverly, 20 miles from Boston and 88 from Portland, a country station in the town of Beverly on the Eastern Railroad.

North Billerica, 33½ miles from Wilton and 17½ from Nashua, a country station in the town of Billerica on the Boston, Nashua & Lowell Railroad.

Talbot Mills, C. P. Talbot & Co. proprietors. This firm run an 8 set mill, containing 3,200 spindles, 50 looms; manufacturing all wool flannels. employ 100 hands, producing 3,000 yards, ¾ and ⅞ goods, per week.

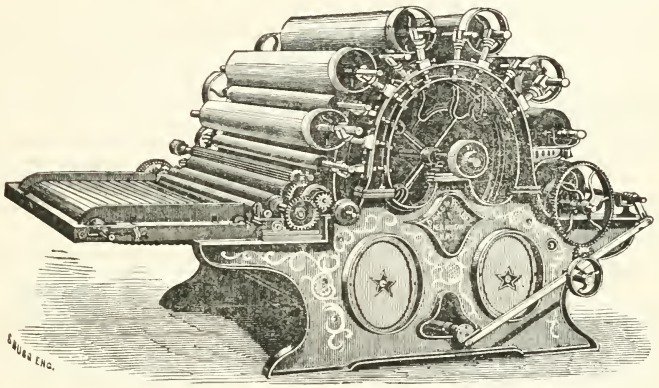
The motive power is furnished from a Whitney wheel, built at Manchester, N. H., 60 horse power. The building is

DAVIS & FURBER,

North Andover, Mass., (near Lawrence,)

—— MANUFACTURERS OF ——

WOOL



MACHINERY,

Card Clothing, Mill Shafting,

Carding Machine, with Patent Seven or Nine Roll Rubber or Tube Condenser,

Card Grinders, Spinning Jacks, Pickers, Dusters, Reels, Beamers, Dressers, Spoolers, Broad and Narrow Common Looms, Drop Box Looms, and Fancy Looms, Broad and Narrow Gigs, Stocking Yarn Reels, Skein Spoolers, Bobbin Winders, Fulling Mills, Banding Machines,

AND CASTINGS OF EVERY DESCRIPTION.

All the above Machinery made with new and improved Iron Frames, or, if preferred, with Wood Frames.

—— ALSO, MANUFACTURERS OF ——

Kirk & Pendergast's Patent Oiler, for Wool Cards.

G. L. DAVIS. J. A. WILEY. J. M. STONE.

heated by steam from a tubular boiler, this boiler also furnishes steam for the dye house. The mill is situated about one-fourth of a mile from the depot, near the railroad. Messrs. C. P. T. & Co. have a chemical and drug mill; employing 50 hands and producing $20,000 of drugs and $10,000 worth chemicals per month.

J. R. Faulkner & Co. manufacturers of flannels. The business was established by Francis Faulkner, and in 1825 the present firm succeeded him. Their buildings consisting of mill building, was built in 1836; 2 stories and basement 72x42 feet of brick, with addition of 81x54 feet, three stories and basement, erected in 1866; contains 8 sets cards, 2,800 spindles, 44 looms. They have 2 fire proof store houses 55x22 feet, 1 story and 60x28 feet, 1 story. Have 70 employees, consume about 23,000 lbs. wool per month, producing 90,000 yards of from 2½ to 5 oz. goods. The motive power is furnished from a 60 horse turbine wheel, built by Kilburn & Lincon, of Fall River, and in case of necessity, have a 50 horse engine, built by Atlantic Works, East Boston.

NORTHBORO', 23 miles from Fitchburg and 35½ from Boston, a village and town on the Boston, Clinton & Fitchburg Railroad, a pleasant farming country, good soil and watered by Assabet river.

NORTHBRIDGE, a small manufacturing village, in a town by the same name, 31 miles from Providence and 12 from Worcester, on the Providence and Worcester R. R., the only establishment here is the Rockdale Mills, owned by Paul Whitin, Charles E. Whitin, Agent; office at Whitinsville. The mill is located a few rods from the Depot on the Blackstone River, 160x64 feet, 3 stories, built of stone in 1856, by P. Whitin & Sons, the present proprietors succeeding 1864. They run 10,000 spindles, 220 looms, employing 125 persons, consuming 8,000 pounds of cotton, and producing 25,000 yards of 40 inch fine cotton sheetings per week. The power is furnished by 3 Turbine Boyden & Upham wheels, the fall here being 9½ feet. Riverdale, a flag station, of 14 houses, 1¼ miles east of Northbridge, has one mill, the Riverdale Mill, Paul Whitin, proprietor, Charles E. Whitin, Agent, office at Whitinsville. The mill is 38x260 feet, 2 stories, built of brick with stone basement. They run 5500 spindles, 120 looms, consume 4,500 pounds of cotton, and produce 16000 yards of 40 inch fine cotton sheetings per week, employing 62 persons. The mill is run by 1 Jonval and 1 Fall River wheel, the fall being 9½ feet. This mill is located on the Blackstone, a few rods from the railroad; was built in 1850, and remodled in 1866. About two miles west of the depot is A. & A. B. Keith & Co., manufacturers of men's boots. The building is 40x85, 3 stories, with an L; employ 200 persons, produce 300 pairs per day, and do a business of $350,000 per year. This firm have also a manufactory at Campello, on the Old Colony and Newport Railroad.

NORTH BRIDGEWATER, 20 miles from Boston, 47½ miles from Newport, on the Old Colony & Newport Railroad, an enterprising and rapidly growing village, containing 6,000 inhabitants and 7 churches. The inhabitants are eugaged mostly in the manufacture of boots and shoes.

MANUFACTURERS.

P. S. Leach commenced the manufacture of men's shoes in 1857. The building he occupies is 55x45, 4 stories; employs 75 hands, produces 3,000 cases and does a business of $120,000 yearly.

Orr & Sears occupy 2 floors of a building 70 x 30, for the manufacture of men's shoes, commencing here in 1867. They employ 30 hands, produce 1,200 cases per year, and do a business amounting to $50,000.

Snell & Atherton, manufacturers of shoe tools, occupy 2 floors 50x34, commencing here in 1854. They employ 20 persons, produce 1,400 dozen of heel shavers, and 600 dozen of welt trimmers, and do a business of $25,000 yearly.

F. O. Howard commenced the manufacture of men's boots in 1850. He now occupies a building 28x38 feet, 3 stories. Employs 14 persons and produces 36 pairs of men's boots daily, doing a business of $30,000 per annum.

Philip Reynolds employs two persons; manufactures organs and melodeons; doing a business amounting to $4,000 per year.

L. B. White commenced the manufacture of men's boots and shoes in 1853. He occupies a building 24x45 feet, 2½ stories, employs 20 persons, beside many outside, producing 200 pairs per day, and doing a business of $60,000 per year.

In 1836, Chandler Sprague commenced the manufacture of lasts and boot trees. He occupies one floor of building 53 x53, two stories and basement, making lasts and boot forms. He employs 12 persons, produces 50,000 lasts and forms, doing a business of $15,000 per year, with a capital invested of $10,000.

E. S. Snell & Co. occupy second floor of the above building, for the manufacture of shoe tools and machinery. Employ six persons, and do a business of $6,000 per year.

J. W. Packard commenced the manufacture of sewing machine needles, in 1850. He occupies one floor of the above building, besides space in other buildings. Employs 25 persons, producing 600,000 needles, and doing a business of $18,000 yearly.

S. V. Tuck occupies a small shop, manufacturing shoe knives. Employs 6 persons, and does a business amounting to $5,000 per annum.

G. H. Gurney commenced the manufacturer of shoes for men's wear in 1862; occupies 4,000 square feet of space; employs 75 persons; produces 150 pairs per day and does a business amounting to $60,000 per year.

Holmes & Southwick commenced here the manufacture of men's and boys' boots and shoes in 1867. The business was established by Mr. H. in 1848. They occupy two floors of a building 33x33; employ 25 persons; produce 6 cases per day and do a business of $30,000 per annum.

W. Webster occupies a forge shop 18x30, 1 story, for the manufacture of shoe knives; employs 7 men and produces 50 dozen per day.

N. Chesman & Co. occupy a building 32x60, 3 stories, wood, for the manufacture of men's shoes; commencing here in 1865; employ 25 persons; produce 1,200 cases per year and do a business of $50,000. Store 76 Pearl street, Boston.

David Howard commenced the manufacture of boots and shoes some 35 years ago. He now occupies a building 30x24, 4 stories and one floor in adjoining building 24x30. He employs 20 persons, produces 60 pairs of boots per day, the business amounting to $75,000 per year.

C. L. Hathaway & Sons commenced the manufacture of leather dressing, blacking, varnishes, &c., in 1868; the business was established in 1854 by the father. They employ 5 persons, and do a business of $35,000 per year.

NORTHAMPTON EMERY WHEEL CO.,

LEEDS, MASS.,

Manufacturers of Patent Solid

EMERY WHEELS

AND OIL STONES.

These wheels work equally well on Steel, Iron or Brass, and will not heat or glaze. The Oil Stones are superior in cutting qualities to the best Arkansas Stone.

Where Wheels are wanted for Brass or Bronze, it should be mentioned in the order.

TESTIMONIALS.

AMES MANUFACTURING CO., Chicopee, Mass.

"Ninety-nine Certificates of every hundred are humbugs, and we don't care to be the hundredth; hence must decline giving one, as we constantly do of late. Your wheel does not require it, as it is itself a better recommendation than we can give it. We find them all right. Truly yours. GEORGE ARMES, Agent.

Your Wheels are the best we have ever used.—MORSE TWIST DRILL CO., New Bedford, Mass.

The Wheel you sent us is the best we ever used or saw.—H. N. FENNER & CO., Providence, R. I.

"They (the Oil Stones) give entire satisfaction.—CHENEY BROS., Manchester, Conn.

Office of FLORENCE SEWING MACHINE CO., Florence, Mass.

Northampton Emery Wheel Co.—Gents:—Having used Marshall's Patent Emery Wheels, manufactured by your company, for the last eight months, we would say that they are superior to any Wheel we have ever used; we find they cut faster and give us no trouble from glazing or heating. Yours truly,

J. W. HOXIE, Supt. Florence Sewing Machine Co.

(See page 275.)

DARIUS HOWARD & SON occupy a building 29x60, 3 stories, for the manufacture of men's boots. Employ 14 persons, besides persons outside; produce 700 cases per year, doing a business of $28,000.

PORTER & PACKARD commenced here in 1865. They occupy a building 24 x 36, 3 stories, for the manufacture of men's shoes. Employ 40 persons and turn out 250 pairs per day.

LEWIS PORTER commenced the manufacture of men's boots in 1862. He employs 20 persons, and produces 48 pairs per day, doing a business of $50,000 per year.

D. WHITTEMORE conducts the business of manufacturing blacking, varnish, &c., for leather. Employs 5 persons and produces 250 gallons of blacking daily.

WM. RICHARDSON commenced the manufacture of men's shoes in 1865. He occupies 2 floors 28x33; employs 6 persons and produces 720 pairs per week.

JOHN BAXENDALE employs 10 persons, commencing here in 1859. He produces 48 pairs of men's shoes per day, occupies 2 floors 32x36 each, and does a business amounting to $16,000 per year.

J. L. HOLLIS occupies a building 28 x 32, 2 stories and basement, for the manufacture of men's shoes, commencing here in 1858. Employs 40 persons, produces 288 pairs per week, the business amounting to $130,000 per year. Mr. H. intends building a new manufactory soon.

F. A. & H. B. THAYER occupy 2 buildings for the manufacture of men's shoes, commencing here about 10 years ago. They employ 50 persons and produce 480 pairs per week.

D. ELDRED commenced the manufacture of mens' shoes in 1862. His shop is 28x50 feet, 3 stories, wood. Employs 50 persons, produces 200 pairs per day and does a business amounting to $100,000 per year.

H. T. MARSHALL employs 15 persons, and produces 15 dozen youths' boots and shoes per week.

C. R. FORD commenced the manufacture of men's shoes in 1855. In 1865 he built a new manufactory 32x60, four stories, connected with one 24 x 24, 3 stories. He employs 100 persons and produces 1,000 pairs per day, doing a business of $300,000. A 15 horse power Gifford & Houghton engine supplies the power.

FRENCH, PACKARD & SONS occupy a building 25x56, two stories, for the manufacture of men's boots; employ 15 persons, and do a business of $30,000 per annum.

D. S. & W. A. HOWARD occupy a building 85x25, 3 stories, with L 82x18, 2 stories, for the manufacture of men's shoes, commencing here in 1865, as successors to D. S. Howard, who established the business in 1850. They employ 100 persons, produce 650 pairs per day, doing a business amounting to $200,000 per annum.

R. A. STODDARD commenced the manufacture of shoes in 1837. He employs 15 persons, producing 75 pairs per day, the business amounting to $25,000 per year.

CHARLES HOWARD commenced the manufacture of sewing machine needles in 1867. He occupies a room 30 x 30 feet, in a 4 story building, employs 15 persons, produces 400,000 needles per year, doing a business of $12,000.

WASHBURN PACKARD occupies a shop 20x24, 1 story, for the manufacture of men's shoes. He employs 3 persons and does a business amounting to $5,000 per year.

KEITH & PACKARD manufacture boot counters. They have recently moved into a larger building 44x30, 2½ stories. They employ 5 persons, consume 40 sides of leather per day, producing 200 dozen of counters, doing a business of $50,000 per annum. A 5 horse power engine supplies the power.

SILVER & GAY,

North Chelmsford, Mass.,

MACHINISTS,

AND MANUFACTURERS OF

Machinists' Tools, Turbine Water Wheels, Carpet, Duck and Jute Looms. Also, Worsted Machinery,

AND TWISTERS AND WINDERS OF ALL KINDS.

HARVEY SILVER, ZIBA GAY.

TYLER COBB manufactures pegging awls and shoe tools generally. He employs 12 persons and does a business of $10,000 per year.

MR. HENRY commenced the manufacture of mens' boots and shoes for the Southern market, in 1853. His building is 56x30, 3 stories. Employs 12 persons in his shop besides many outside. His business amount to $40,000 per annum.

A. W. HAYDEN, commenced the manufacture of men's shoes, in 1866. He employs 25 persons, produces 150 pair per day, and does a business of $40,000 per year. All of his goods are for the Southern trade. The increasing trade obliged him to enlarge his works which he is now doing.

B. F. WHEELER, commenced the manufacture of tacks and nails in 1857. His works are located one mile west of the village. His main building is 50x20, two stories and basement, and an office, &c., 20x30, one story. He uses 9 machines, consuming 4½ tons of iron per month, besides zinc and copper. A Ryder wheel supplies the power, the fall being 6⅝ feet. His business amounts to $12,000 per year.

R. C. KEITH & BROS., Shoe Manufactory.—employ about 20 hands, and produce about 100 pairs daily, during the busy season. Have been in business some twenty-five years, and never failed.

ELISHA WASHBURN, manufacturer of liquid and heavy dressing blackings. He employs 3 persons in his establishment.

SAMUEL HEYROD, manufacturer of Congress boots and Oxford ties, commenced business in 1860. He occupies two buildings, each 24x36 feet, and 2½ stories high. He employs 60 hands, produces 75,000 pair yearly, and does a business of $125,000 annually. The power is furnished by an eight horse power engine.

NORTH CHELMSFORD, 29 miles from Boston and 4 from Lowell. A village on the Boston, Lowell and Nashua Railroad, and Stony Brook Railroad. The village is situated on the right bank of the Merrimac river, but the motive power for the manufacturing establishments, is furnished from the Stony Brook, which flows through the upper part of the village, emptying its waters into the Merrimac river, near the depot. North-Chelmsford contains 2 churches and 500 inhabitants.

SILVER & GAY machinists and machinery manufacturers, commenced business in 1859. The business was established in 1834 by Ira Gay. They occupy buildings leased of G. T. Sheldon, about one-eight mile from depot near the Stony Brook Road. Their building consists of machine shop 94x 44 feet, 3 stories and basement with L 94x38 feet, 2 stories and attic. The basement and two floors in both buildings, are filled with heavy machinists' tools and the 3d floor of main building is used for wood work department, and in the attic of L for setting up machinery. Attached to the main building is a 2 story building 32x14 feet. Office on first floor and drafting and counting rooms on second.

Smiths' shop 54x40 feet, 1 story pattern house 56x24 ft. 2 store houses, 1 story each, 20x35 and 20x30 feet, 2 lumber houses, across the railroad, 40x50 ft. 1 story each. They employ 60 hands, building turbine water wheels and worsted machinery of all kinds. Probably the first worsted machinery built in this country, was built at this establishment. This firm built the first Boyden Turbine wheel, used by the Essex Co. of Lawrence. The last they built, was for the Merrimac Co. of Lowell.

Their motive power is furnished from a 3 feet turbine wheel of 25 horse power. They have a 30 horse power engine, built by Cook, Rymes & Co. of Charlestown. This engine is furnished with steam from a flue boiler, built by Ashton of Lowell. This boiler also furnishes steam for heating the works.

G. T. SHELDON commenced business in 1864, for the manufacture of ladies' merino hose; occupying a 2 story brick building, 116x76, with L 116x76, 1 story; employing 100 hands; running 2,500 spindles, 27 circular looms, and 16 footers, consuming on an average 500 lbs. wool and cotton per day, producing 125 dozen pairs hose. The motive power is furnished from a 30 inch turbine wheel under 24½ feet head of 90 horse power. The mill is heated by steam from a flue boiler made by Allen & Endicott of Boston.

CHELMSFORD FOUNDRY CO., manufacturers of iron castings, occupy a foundry 120x60 feet. They employ from 100 to 125 hands and produce 4 tons of castings daily and use water power.

NORTH CHELSEA, 6 miles from Boston, and 2 from Chelsea, a station and town on the Eastern Railroad. Has 2 churches, 1 Orthodox and 1 Unitarian.

J. H. PHITTIE occupies a one story wooden building, 18x360 feet, located on School street, where he employs 7 hands, for the manufacture of spun yarn, marline, house lines, worm line, and hambro line. Commenced business in 1867, and does a business of $60,000 per annum.

D. & L. SLADE, occupy a 2 story wooden mill 30x60 feet, for the manufacture of spices, cream tartar, and meal. They have 3 run of stone, power furnished by 4 water wheels, combined equal to 35 horse power. Also, occupy a 3 story brick building, located at Nos. 196 & 198 Broadway, Chelsea, Mass., for the manufacture of yeast powders. Commenced business in 1847; has 15 employees. Sales Room No. 21 India street, Boston, Mass.

NORTH DANVERS, 19 miles from Boston and 21 from Newburyport, a village in the town of Danvers, on the Newburyport Railroad.

NORTH DIGHTON, 37¾ miles from Boston, a manufacturing village on the Old Colony and Newport Railroad. (See also Dighton.)

B. A. Chace, manufacturer of spool cotton and 2, 3 and 4 ply yarns. Established in Dec. 1862, at which time Mr. C. succeeded his father, Oliver Chace, Esq. of Fall River, who commenced this business about 35 years previous. The mill is built of wood 140x40, 3 stories with wing 100x40; power is furnished by 2 Fall River turbine water wheels and one steam engine manufactured by Corliss Steam Engine Co. of Providence, of 65 horse power. Mr. Chace in the manufacturing of yarns, consumes 125,000 lbs. of cotton per annum producing 100,000 lbs. of yarn per year. In the manufacturing of spool cotton he consumes 25,000 gross spools per annum, producing 300,000 dozen of spool thread per year. This mill was built by a company in 1810, in 1812 they were incorporated as the Bristol Manufacturing Company, who sold to James DeWolf, Esq., of Bristol, 1819. In 1822 Mr. DeWolf sold out to Mount Hope Manufacturing Co. This company sold the same to T. Shove & Co. in 1843 of whom the present owner purchased in December, 1862. All the companies occupying this mill previous to Mr. Chace, manufactured cotton cloth.

Among other enterprising manufacturing concerns of New England is the Dighton Furnace Co., manufacturers of wrought iron, steam and gas pipe, and cooking, office and parlor stoves.

Their manufactory employs about 140 hands. They commenced business in the old foundry at North Dighton in the spring of 1857, employing about 12 hands, in the manufacture of stoves; but such was the demand for their goods, that, at the end of 2 years, they were obliged to build a new foundry, to which additions have been made every year. In 1863, they added to their already extensive business a mill, with 2 furnaces, for the manufacture of wrought iron pipe for steam, water and gas; in the manufacture of which, by new and improved machinery and the employment of the best workmen, their aim has been to produce a quality of goods not to be excelled, and that their aim has been accomplished, is attested by the fact of the constantly increasing demand for their goods, and the entire satisfaction expressed by all who use them. About 2,000 tons of plate iron, 1,000 tons of pig iron, and 1,500 tons of coal, are annually used by this company. The business of the company is managed in the most systematic and thorough manner, each of the partners, of whom there are four, having charge of a special department of the business, to which he gives his whole time and attention. Every man in their employ knows what his particular business is, and is expected to attend to it faithfully. The 10th of each month is pay day, when each man receives his month's wages. The monthly pay roll amounts to more than $6,000. The company have a store in Boston at 96 and 98 North street, through which a large portion of their business is done, and where a complete assortment of their goods can always be found. Mr. George F. Gavitt is the Treasurer of the company.

L. Lincoln & Co., paper manufacturers; business established in 1850. Manufacture common, tack and screw paper; occupy 2 buildings—one 2½ stories high, 40x60; one 3 stories high, 120x30. Employ about 25 hands. Power is furnished by a turbine water wheel 60 horse power, made by Kilburn, Lincoln & Co., of Fall River, and an engine built by the Foundry Machine Co., of Taunton, 60 horse power. Post Office address, North Dighton.

James D. Codding & Co.'s Foundry, established in 1865. This company occupy the buildings formerly occupied by the Dighton Furnace Company. The main building is of wood, 60x30, with wing 30 feet square; 1 building, 2 stories, wood, moulding shop below and carpenter shop above, 24x26 feet. This company manufacture cook and ship stoves, cast iron sinks and hollow ware. Post Office address, North Dighton.

North Easton, Mass., 22¼ miles from Boston, 45¼ from Newport, a village containing three churches and 2,000 population, located on the Old Colony & Newport Railroad. This place, with small exceptions, may be said to be the creation of the one house, or more correctly, of one household during two generations. Here is manufactured, on a large scale, an instrument indispensable to the progress of civilization—the American shovel. The principle, if not the sole owners of the establishment that produces this article, need no special introduction to our readers they will be recognized as among the millionaires of the country the moment we name them. One is Hon. Oakes Ames, M. C.; the other, his brother, Hon. Oliver Ames, President of the Union Pacific R. R. Co. In the last century, most of the shovels used in New England were of wood, iron shod.—a rough tool generally made by the farmers themselves, with a little help from the neighboring blacksmith. It is some eighty or more years ago that Mr. John Ames, of Bridgewater, Mass., began to send to market something more serviceable and shapely. He used American iron. The bars were brought, say two at a time, from the neighboring forges, by his son, on horseback. The shearing, hammering, &c., were done at his own shop; for the handle he was indebted to a cabinet maker. During the Revolutionary war, Mr. Ames turned his attention from the implement of peace to the weapon of war, and entered into a contract to furnish the government with guns. After the struggle for independence was over, he applied his ingenuity to the fabrication of knives and forks, and scythes, for which there was, at that time, a pressing call.

It was about 1800 that the youngest son of John, Mr. Oliver Ames (who died but a few years ago, having lived to be nearly four score, vigorous and active almost to the last, the head of the concern of which he was the founder,) recommenced shovel making. In 1814, he established himself at this place, having, however, several branches or tributary colonies, for carrying on some of the subsidiary principles, in towns near by. In 1845, he took his two sons into partnership. How well they co-operated with, and how much they, with several of their sons as assistants, have accomplished, will be seen by the following descriptions, facts and figures:—The main building, known as the "Long Shop," is 525x35 feet, 2 stories with an L 240x45 feet, 2 stories, and an engine room 40x20 feet; the whole substantially built of stone. The power for the "long shop" is furnished by an 120 horse power engine, made by Corliss Steam Engine Co. In another engine house is a 180 horse power engine, made by Corliss Steam Engine Co., which is the motive power for 14 trip hammers in a building 175x60 feet with L 110x35feet, all one story; besides these main structures, there are 6 hammer shops, 2 of them 80x40 feet and 170x50 feet respectively, in which are more hammers, bringing the number up to 40. There are also a polishing shop 103x35 feet, handle shop 200x40 feet, 2 stories; a grinding shop with 5 stones, and a shearing shop. The works are half mile in length, placing them in a continuous line. Besides a large engine, they have a 25 horse power Corliss and a 15 horse power Campbell & Whittier. They also own 8 water powers on a branch of the Taunton river, besides 2 reservoirs, 100 and 120 acres respectively.

The advantages derived from a combination of machinery and a correct division of labor, is seen in the fact that a shovel is made and finished in every eight seconds, producing about 400 doz. per day, 425 men being required in their manufacture. The stock consumed in a single year is 1,400 tons of the best Swedish iron, 1,000 tons of cast steel, 3,500 tons of fuel, 50 tons of emery.

For convenience sake, we have used the word shovels as a general term, including under it spades, which amount to

one-sixth of the articles made; seven different qualities of shovels being made. Like the manufactory of the Fabers, in Nuremberg, this establishment is a family affair, pursuing steadily one vocation, keeping in that vocation up with the times, enlarging and perfecting its doings and meeting all claims with sagacity ingenuity and unremittiug diligence. There is no mystery in the fact that the Ameses manufacture nearly two-thirds of the shovels in the United States, and that their shovels are in constant demand, and have the preference at home and abroad.

A. A. Gilmore & Co. commenced the manufacture of men's calf boots in 1851. They occupy a building 30x40 ft. two stories, with ell 25x25 feet, four stories. They produce 100 pairs per day, doing a busines of $100,000 per year.

E. W. Gilmore & Co. occupy a building 100x80, two stories, wood, with an ell 125x30, one story, for the manufacture of wrought iron hinges, butts, &c. They employ 40 persons, and produce 225 dozen pairs per day of hinges. A breast and turbine wheel supplies the power: the fall here being 12 feet.

Geo. Brett commenced the manufacture of women's shoes in 1865. The building is 35x45, three stories. He employs 50 persons, and does a business amounting to $60,000 per annum.

J. B. King & Co. commenced the manufacture of men's calf boots, in 1864. They occupy one building; employ 50 persons, produce 80 pairs daily, and do a business of $75,000 yearly.

J. L. Lynch & Co. commenced the manufacture of men's shoes, in 1865. His manufactory is 38x20, two stories with wing. They produce 120 pairs per day, doing a business of $50,000 per year.

NORTHFIELD, 9 miles from Grout's Corner, (now Miller's Falls,) 109 from New London, and 12 from Brattleboro', a station and town in Franklin County, on the Brattleboro' Branch of the Vermont and Massachusetts Railroad and on both sides of the Connecticut River. The Indian name is Squakeag. Most of the land in this town is excellent and the village is very pleasant.

NORTHFIELD FARMS, 103 miles from New London, and 18 from Brattleboro,' a country station in the town of Northfield, on the Brattleboro' Branch of the Vermont and Massachusetts Railroad.

NORTH HANSON, 23¼ miles from Boston and 14¼ from Plymouth, on the Plymouth Branch of the Old Colony and Newport Railroad.

NORTH HARWICH, a country station on the Cape Cod Central Railroad, about 86 miles from Boston.

NORTH HATFIELD, 24 miles from Springfield and 12 from Greenfield, a country station in the town of Hatfield, on the Connecticut River Railway.

NORTH LEOMINSTER, 46 miles from Boston, 4 from Fitchburg; a village of 300 inhabitants, in the town of Leominster, on the Boston and Fitchburg Railroad.

Merriam, Hall & Co., manufacturers and dealers in Pine and Chestnut Furniture, Bureaus, Sinks, Glass Frames, &c., commenced business in 1864. They occupy a 3 story building, 100x40 feet with basement. They employ 50 hands and do a business of $75,000 per per year.

NORTH LITTLETON, 4 miles Groton Junction and 13 from Lowell, a flag station on the Stony Brook Railroad.

NORTH OXFORD, 9 miles from Worcester and 51 from Norwich, a country station on the Norwich and Worcester Railroad.

Rhodes & Wilmarth commenced business in 1864, for the manufacture of printing cloths. The factory is 34x80 feet. They employ from 55 to 64 hands, producing 2,200 yards, and 600 lbs. of coarse yarn daily. Amount of business $500 per month. The factory is located on French river, having a fall of 22 feet.

NORTH READING, 14 miles from Lowell, and 10 from Salem, a station on the Salem and Lowell Railroad, in the town of Reading.

NORTH SANDWICH, situated 58½ miles from Boston, and 21 from Hyannis, on the Cape Cod Railroad. The number of population is about 150.

NORTH WEBSTER, 15 miles from Worcester and 45 from Norwich, on the Norwich and Worcester Railroad, a small village owned by Samuel Slater & Sons, who manufacture grey cambrics here. (See Webster.)

NORTH WEYMOUTH, 15 miles S. by W. from Boston, on the South Shore Railroad, a small post village.

Elexis Torrey & Co., commenced the manufacture of shoes in 1853. They employ 150 persons, produce 480 pairs of shoes daily, and do a business amounting to $225,000.

Augustus Beals, manufacturer of ladies' and gent's first quality serge royal cord, velvet and plush slippers. The business was established by the present proprietor in July, 1868. He occupies one building, 2½ stories high, and 30x50 feet, and employs twenty workmen. He consumes about $3,000 worth of stock, and makes from 3,000 to 3,500 pairs of slippers monthly. He does a business of $4,000 per month.

E. Bates, manufacturer of Calf, and buff grain boots. The business was commenced in 1852, by E. Bates & I. D. Wildes. Mr. B. occupies a building 32x30 feet, employing 25 hands, and doing a business of about $50,000 per annum.

NORTH WOBURN, 43½ miles from Wilton, and 11½ from Boston. A station in the town of Woburn, on the Boston, Nashua and Lowell Railroad.

DOORS, WINDOWS, SASHES, BLINDS.

WAKEFIELD, LOVEJOY & CO.,

Manufacturers and Dealers in

DOORS, SASHES, BLINDS,

Glazed Windows, Blind Trimmings, &c.

ORANGE, MASS.

Particular attention given to Southern trade.

N. S. WAKEFIELD. P. H. LOVEJOY. JOHN BRIGGS, JR.

WINN, EATON & CO. occupy a three story wooden building 92x61 feet, for the manufacture of buff, grain and split leather. Commenced business in 1856; have 40 employees, turn out about 16,000 sides of leather per annum, doing business to the amount of $115.000. Their machinery is driven by an engine of 15 horse power, built by Bisbee, Endicott & Co., of Chelsea, Mass., with 2 Harrison boilers, 100 horse power combined, built at Philadelphia, Penn. Office and salesroom, 71 Kilby street, Boston, Mass.

C. T. RICHARDSON occupies a two story wooden building 50x30 feet, for the manufacture of upper leather. Commenced business in 1863; have eight employees, and turn ont 200 sides of leather per week. Power furnished from engine in building adjacent.

NICHOLS, WINN & CO. In 1836 commenced the manufacturing of ladies', misses' and children's boots and shoes, occupying a 2 story wooden building 54x90 feet, and a two story building 46x28 feet, have 40 employees and turn out 600 pairs per week; do a business of $75,000 per annum. Office in Boston, 71 Kilby street.

POND & TIDD occupy a 3 story wood building 33x25 feet, wing a wing 35x25 feet, for the manufacture of upper leather; have 12 employees; turning out about 10,000 sides per year; doing a business of $40,000. Office in Boston 79 Pearl street.

J. O. CUMMINGS & CO. commenced the currying of leathers in 1865, occupying a 2 story building 50x30; employing 25 hands; turning out 450 sides per week; run an engine of 10 horse power, built by Thos. Leavitt of Boston; steam furnished from a tubular boiler made by John H. Davis of East Boston, Mass.

NORTH WRENTHAM, a village of 250 inhabitants, containing 2 churches, situated 22¾ miles from Boston, 30 from Providence and 47¼ from Southbridge on the Boston, Hartford & Erie Railroad.

NORTON, 5½ miles from Mansfield and 8 from Taunton, on the Taunton Branch Railroad, a village containing 2 churches, situated one mile west of the depot. A very flourishing female boarding school is located here. Population of the town 2,000.

THE NORTON FURNACE CO., which was established 1825, manufacture stoves, furnaces, ranges, &c. The building occupied by them is 230x50 feet, with an L of 70 feet. They melt from 3 to 5 tons of iron daily, and employ about 70 workmen. This company make a speciality of manufacturing the Norton cooking stove, Norton parlor stove and the Norton furnaces. They also make very fine and nicely fitting castings. The workshop is situated one mile from Crane's Station. A. A. Lincoln, Jr., agent.

OAKDALE, 36 miles from Nashua, 10 from Worcester, a village on the Worcester & Nashua R. R. containing 1 church and 800 inhabitants.

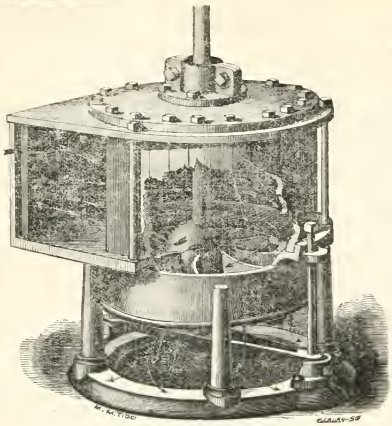
L. M. HARRIS & CO., manufacturers of light sheetings and drillings, established the business in 1845. The main building is 3 stories high 45x92 feet with an L 24x30 feet, 2 stories high and a picker L 26x30 feet, 1 story. They run 3,200 spindles, 80 looms, 36 picks and 40 reeds, consuming about 135,000 lbs. of cotton, and produce 167,500 yards yearly. They use a 16 feet iron wheel, are situated on Quinepoxet river, having a fall of 14 feet. Agents in New York, Woodward, Baldwin & Co., and Maxwell & Barker; in Boston, Danforth, Ripley & Clark.

OAK HILL, a country station of eight houses, situated on the Charles river, 9 miles from Boston and 28½ from Woonsocket, on the Woonsocket division of the Boston, Hartford & Erie Railroad.

OLD COLONY HOUSE, about 18 miles from Boston, on the South Shore Railroad, a country station.

ORANGE, 37 miles from Fitchburg and 19 from Greenfield, a village and town on the Vermont and Massachusetts Railroad. The village has a rapidly increasing population of 2,000, and contains two churches. The town was incorporated in 1783. Miller's river affords the town a good water power, and a large hill in the town a fine prospect. The surface is uneven and the soil is better fitted for grazing than tillage.

WAKEFIELD, LOVEJOY & CO., manufacturers of doors, sash and blinds. This firm commenced business in 1868. The business was established by N. S. Wakefield in 1867. They occupy a 3 story building in the upper part of the village, 175x40, and employ 50 hands. Their machinery consists of 3 bench saws for sawing out stock, 3 stickers, 3 mortising machines, 3 tenoning machines, 1 Smith's patent blind stile boring machine, 1 Buck's patent blind mortising machine for mortising stationary blinds, 1 blind slat planer, capable of planing and rounding 10,000 slats per day; 1 machine for beading and halving blinds, 1 rod machine, 1 blind staple machine, 1 slat tenoning machine, capable of tenoning 1,000 per hour, 2 cutting off saws and 2 small planers.



TURBINE WATER WHEEL MANUFACTURING CO.

CHASE'S

IMPROVED, EXCELSIOR, JONVAL TURBINE

WATER WHEEL.

PATENTED JULY 31, 1866.

Warranted to give a superior per cent. of power to that from any other wheel, as shown from actual tests, by a standard dynamometer. These wheels have no guide plates, being thus unequalled in simplicity, convenience, durability and low price, as a first class wheel.

Chase's Celebrated, Improved Superior

CIRCULAR SAW MILLS.

Surveys for Dams, Mill-Sites, &c. Cotton, Woolen, Paper, Lumber, Flouring and Grist Mills constructed.

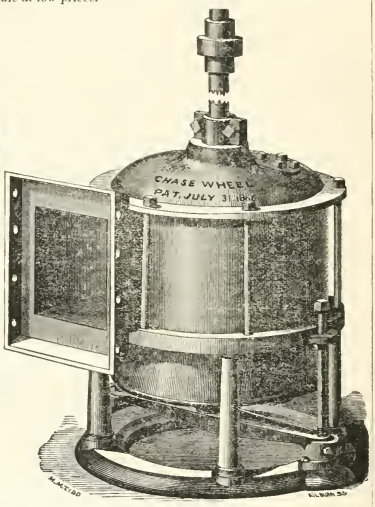
☞ SHAFTING, GEARS, &C., AT SHORT NOTICE. ☜

Power of Wheels tested by Standard Dynamometer. For Circulars with Cuts representing, prices and description, please address

J. D. CHASE & SONS, Orange, Mass.

General Agents, Machinists and Mechanical Engineers.

☞ Second-hand Wheels of various kinds, in good order, for sale at low prices.



These machines are driven by a 40 horse power engine, made by the Putnam Machine Co., of Fitchburg; furnished with steam from a tubular boiler, made by McKay & Aldus, of East Boston. This firm turn out about 200 windows, 100 pairs blinds and 100 doors per day. They employ 2 glaziers.

L. KILBURN & CO., commenced the manufacture of furniture in 1863, occupying a 2 story building, 115x40 feet, situated on the right bank of the river, near the centre of the village. They employ 35 hands, and turn out from 1,200 to 1,500 pieces of furniture per month, mostly chamber sets and bureaus. The motive power is furnished by 2 turbine wheels of 40 horse power. They also have a chair manufactory, where they employ 65 hands, occupying a building 94x30 feet, 3 stories, turning out 300 chairs per day. This branch of industry was commenced by them in 1860. The motive power for this work is furnished from 2 turbine wheels of 50 horse power.

THE TURBINE WATER WHEEL MANUFACTURING CO. was established in 1857, for the manufacture of J. D. Chase & Son's patent water wheels; also, Chase's improved lever set circular saw mills, by an association formed by L. Kilburn & George D. Pomeroy, L. E. Holmes and S. Poland. J. D. Chase & Sons, Agents; L. Kilburn, Treasurer, and L. E. Holmes, Secretary.

This company have erected a 3 story brick building 100x35 feet, filled with the necessary machinery for making their wheels and saw mills; furnished with power from turbine wheels of their own make; turning out on an average, ten water wheels, four mills, and about 12,000 pounds gearing, shafting, &c. per month.

THE CHASE WHEEL, manufactured by this Co., was invented by Messrs. J. D. Chase & Sons, each practical machinists, engineers and mill builders of a life-time experience, and their wheels are manufactured under their personal care. They are natives of Vermont, where after several years' experience in building various kinds of water wheels, with unsatisfactory results, they began developing their own idea of a water wheel, and held strictly to practical demonstrations and observations with a view to obtaining the best possible result. After many experiments, alterations and improvements, they at length succeeded in producing the present Chase wheel. This wheel they claim is unequaled for its simplicity and durability, and will give more power for the same sized wheel than any other wheel now made. It is

also so constructed that it gives as good a result from the water used as has been yet reached by any turbine wheel, and this has been *proved* by actual tests. These wheels are now being extensively introduced in all the various branches of manufacturing throughout New England, Pennsylvania and New York, with great success. For further particulars in regard to these wheels or machines, and mills. See their advertisement on preceding page.

WHITNEY, LORD & Co. commenced business about one-quarter mile from depot, for the manufacture of wooden ware, such as pails, buckets, tubs, &c., occupying three floors in building 125x50, rooms being 30x50 each; employ 12 hands, making about 400 pails per day.

The motive power is furnished by 5 turbine wheels of 200 horse power combined.

A. F. JOHNSON & Co. commenced business in 1855, for the manufacture of the gold medal sewing machine. Their main building is 120x30, two stories, filled with machinery for making sewing machines. The japanning being done in building 30x45, two stories, which also is used for office and store room. They employ 91 hands and turn out 300 machines per week.

Their motive power is furnished from a 30 horse power turbine wheel, 3½ feet diameter, 7 feet fall.

HUNT, WAITE & FLINT, turbine water wheel manufacturers, &c., declined giving any information.

ORLEANS, situated 93 miles from Boston, and 30 from Provincetown, at the terminus of the Cape Cod Central. The town contains about 1700 inhabitants, and 4 churches. The Cape Cod Railroad have only extended their road to this town, but have a charter to carry it through to Provincetown, taking in the towns of Eastham, a town of 900 inhabitants, 1 mile distant, containing 1 church.

OXFORD, 11 miles from Worcester and 49 from Norwich, on the Norwich and Worcester Railroad, a village and town by the same name watered by the French river. The original township of Oxford was eight miles square and was granted to Joseph Dudley and others in 1680. The village contains 6 churches and one bank.

SETH DANIELS & Co. commenced the manufacture of women's shoes in 1848. They occupy a building near the depot; employing 30 persons and producing about 100,000 cases per year.

E. HARWOOD commenced the manufacture of women's shoes 21 years ago. He occupies a medium size two story brick building with stone basement, situated near the depot. He employs 30 persons; producing about 3 cases per day.

DAVIS & WILLIAMS occupy a building 22x50, 2 stories and basement for the manufacture of women's shoes; employ 50 persons and produce 3 cases per day.

GEORGE HODGES commenced the manufacture of flannels in 1840 at North Andover. In 1846, he started business here. The mill is about 1 mile west of the depot, and is 120x35, 3 stories, built of wood with stone basement, with picker house attached, 30x50, 1 story. He employs 75 person, consumes 150,000 lbs. of wool, and produces 500,000 yards of white flannel per year. A 4 feet Rider wheel furnishes the power, the mill being located on French river, a tributary of the Blackstone; fall 16 feet. Dale Bros., 61 & 63 Franklin street, Boston, agents.

T. T. GAY employs 1 man, making about 25 cases of women's shoes per year.

W. H. H. THURSTON employs 2 men, producing one case of shoes per day.

NICHOLS, STOWE & Co. commenced the manufacture of women's shoes in 1865. The manufactory is near the depot, employing 4 persons and producing 1½ cases per day.

M. BUFFUM & SONS. Business established in September 1st, 1868. They occupy a factory building, 2 stories high, 64x134 feet, and there is also a stone building used for drying and dyeing purposes, 30x60 feet, 3 stories, together with several other out buildings. They are located upon what is called "Little River." They manufacture black Doeskins. Run 3 sets cards, and 20 broad looms, employ from 50 to 60 hands, and produce daily about 500 yards of 6-4 and 3-4 goods. They used to drive their machinery by a water wheel, 16x16 feet, under 14 feet fall. The woolen business was established at this place in 1847, previous to which date there were at different times a saw and grist mill, scythe manufactory, and a mill for manufacturing cotton thread.

L. B. CORBIN & Co., established business in 1841, for the manufacture of womens' misses' and childrens' heavy shoes of all descriptions. They occupy 2 buildings, 3 stories high, 24x60 feet, employ 75 hands, and produce 300 pairs of shoes daily. Amount of business $120,000.

PACKARDS, 5 miles from Pittsfield and 15 from North Adams, a flag station on the Pittsfield and North Adams Railroad.

PALMER, situated on the Chicopee river, at the intersection of the New London, Willimantic and Palmer, from the South and the Amherst and Belchertown Railway from the North, with the Boston and Albany Railroad, 83 miles from Boston, 117 from Albany, 65 from New London, and 10 from Amherst. Has a population of about 1,000 and contains 2 churches. The town of Palmer was originally settled by a colony from Ireland. The surface is hilly, but the soil good, particularly along the banks of Ware and Swift rivers by which it is watered.

SQUIER & WOOD. The business was originally established by J. A. Squier in 1840, and in 1866 the present partnership was formed. They occupy 2 buildings—one 50x30 feet, 2 stories, the other 60x30 feet, 1 story. They manufacture iron castings, but devote their attention more particularly to the manufacture of machinery. They employ from 6 to 10 hands, turn out on an average about 1,200 lbs. castings per day, use a 10 horse power engine, and do a business of about $20,000 per annum.

AT Ware, reached from this station, is THE OTIS COMPANY, who commenced business in 1840, for the manufacture of cotton cloth and hosiery. They occupy 3 buildings, 200 x50 feet each. They run 24,000 spindles and consume 80 bales of cotton weekly. They use 5 turbines, 60 to 78 feet.

Agents—J. S. & E. Wright & Co., Boston.

AT Bond's Village, reached from this station, is the manufactory of the BOSTON DUCK CO. Commenced business in 1843, for the manufacture of sheetings and shirtings; occupy a building 240 feet long by 54 feet wide, employ 300 hands, and producing 12,000 yards daily. This mill contains 12,000 spindles, 324 looms. The power is furnished by water, from the Swift river. Their Selling Agents are J. S. & E. Wright & Co., of Boston and New Yook.

PAPER MILLS, 16 miles from Lowell and 8 from Salem, a station on the Salem and Lowell Railroad.

PARKERS, a flag station between the stations of Baldwinville and Royalston, on the Vermont and Massachusetts Railroad.

PEABODY, formerly South Danvers, 17 miles from Boston, 22 from Lowell, and 2 from Salem, a village and town on the Salem and Lowell Railroad and Lawrence branch, named in honor of George Peabody, a citizen of this town. The Peabody Institute is a stately edifice, 82 feet in length by 50 in breadth, built of brick and ornamented with Brown Freestone. On its front is a slat of freestone with the words "Peabody Institution," in relief. The lecture hall occupying the whole of the upper story, is finished with neatness and simplicity, and furnished with seats for about 750 persons. Over the rostrum hangs a full length portrait of Mr. Peabody, by Healey, which has been pronounced by connoisseurs to be one of the best of that artist. It was set for by him, at the request of the citizens of the town, but on its completion was presented to them. The library room on the lower story is commodiously arranged for the delivery of books. The shelves are placed around the corners of the room, but by the addition of alcoves the capacity can be greatly increased. This institution contains a library of about 12,600 volumes, built under the direction of George Peabody, Esq., and presented to the citizens of South Danvers. The building is situated on Main street. The corner stone was laid in August, 1853. It contains a correct likeness of the Queen of England, set in a large frame ornamented with gold, and valued at $70,000, presented to George Peabody, by her Majesty, as a token of her appreciation of his noble acts of more than princely munificence to the poor of London, and confided to the care of the trustees of the Peabody Institute at South Danvers, (now Peabody) the place of his nativity, A. D. 1867. The building also contains busts of Milton, Hawthorne, Webster and Peabody; also, 2 gold boxes presented to him in Europe, valued at 100 guineas each. In this town there are a number of churches, banks, schools, &c. Population in 1865, 6,550.

MANUFACTURERS.

FRANK K. PEMBERTON & SON occupy 2 wooden buildings, one of which is 4 stories 30x100 feet, and the other 3 stories 24x40 feet, located Nos. 24 and 26 Wallace street, for the manufacture of sheep skins and skivers. They employ 12 hands and have facilities for turning out 2,500 skins per week. Their machinery is run by an engine of 5 horse power with a flue boiler of 30 horse power. The business was established in 1844.

WINCHESTER & BLANEY, wool pullers and tanners, also dealers in sheep skins, skivers and white and colored wool, commenced business Jan. 1st, 1865. They occupy a 3½ story wooden building 30x425 feet, located on Walnut street, where they employ 45 hands and turn out about 1,200 skins per day. They use for various purposes such as scalding skins, making color, &c.; a flue boiler of 50 horse power made by James Haslan of Salem, Mass.

D. WOODBURY & Co. occupy a 4 story wooden building 24x179 feet, located in the rear of Walnut street, for the manufacture of white and colored skivers; employ 20 hands; turn out about 1,500 skins per week, and do business to the amount of $100,000 per year. Their machinery is run by an engine of 10 horse power, built by Huntoon, with a tubular boiler of 30 horse power, built by James Haslan of Salem, Mass. Business established 1865.

DAVID ROBERTS, manufacturer of goat and sheep skins, commenced business in July, 1865. They occupy a 3 story wooden building 80 feet front by 30 feet, with an L 25x180 feet, located on Walnut street; employs 50 hands, turn out about 500 skins per day, and does business amounting to $150,000 per year. The machinery in this establishment is run by an engine of 15 horse power, built by Bisbee & Endicott, of Chelsea, Mass., with a flue boiler of 30 horse power, built by Otis Tufts, of East Boston, Mass. Mr. Roberts also manufactures gas meter leather, a very thin kind of sheep skin used in dry gas meters.

JOHN FROST occupies a 1 story wooden building covering 10,000 square feet of land used as a tannery, lime house, beam house, bark mill and hide mill; also a 3 story wooden building 28x50 feet, with an L 20x20 feet, used as a currying shop, located in the rear of Main, near Walnut street, where he employs 13 hands, in the manufacture of upper leather, of which he turns out about 14,000 sides per year, and does a business of about $50,000. The machinery of this establishment is run by an engine of 30 horse power, built by Bird & Co., of Boston, and an engine of 5 horse power built by John Weston, of Salem, Mass., with a flue boiler of 30 horse power, built by James Tetlow, of Boston. Mr. Frost commenced business in 1862.

J. A. LORD occupies a 2 story wooden building 30x62 feet, also 1 floor of a 2 story building 30x160 feet, located on Hardy street, for the manufacture of wax, split and kip leather. He employs 12 hands, turns out about 20,000 sides per year and does business to the amount of $100,000. Commenced business in 1836.

J. GIDDINGS commenced business in 1850. He occupies a 3 story wooden building 46x50 feet, located on Spring street, where he employs 6 hands in the manufacture of leather, of which they turn out about 12,000 sides per year.

ANDREW PORTER commenced the manufacture of leather in 1827. He occupies a 3 story wooden building 28x57 feet, located on Hardy street, where he employs 6 hands and turns out about 100 sides of upper leather per week.

L. & G. H. POOR occupy a 2½ story wooden building 25x 70 feet with and L 15x18 feet, located on the corner of Wallis and Upton streets, for the manufacture of leather. They commenced business in 1867; employ 9 hands and turn out about 400 sides per week.

BROOKS & MESSER occupy a 4 story wooden building 30 x90 feet, located on Wallis street, where they employ 20 hands in the manufacture of wax, kip and split leather, of which they turn out about 1,000 sides per week, and do a business of about $300,000 per year. Business established in 1853. Power supplied by an engine of 7 horse power, built by Lewis Osborn, of East Boston.

JOSEPH JACOBS, JR., commenced business in 1862. He occupies a 4 story wooden building 30 x 100 feet, located on Central street, where he employs 25 men in the manufacture of wax, kip and split leather, of which he turns out about 1,200 sides per week, and does business to the amount of $250,000 per year. The machinery is driven by an engine of 15 horse power, with a flue boiler of 30 horse power, built by the Putnam Machine Co., of Fitchburg, Mass.

WILLIAM PEIRCE, leather manufacturer, commenced business in 1858, and occupies four wooden buildings, 2 stories, 26x140 feet, 2 stories 25x62 feet, 1 story 45x122 feet, and 1 story 42x62 feet respectively, where he employs 9 hands in the manufacture of upper leather, of which he turns out 20,000 sides per year, and does business amounting to $200,000. Power supplied by an engine of 10 horse power, with a flue boiler of 15 horse power, built by the Putnam Machine Co., of Fitchburg, Mass.

F. UPTON & Co., commenced the manufacture of Union Sole Leather on Foster Street, in the year 1861. They occupy 4 wooden buildings as follows: 1st story, 36x136 feet with an ell 20x100 feet, used as a tannery; 2d, 2 stories,

30x100 feet, the first story used for scouring, and the 2d for drying and rolling hides; 3d, 2 stories 36x80 feet, the 1st story of which is used as a beam house, and the 2d as a drying house; 4th, 1 story, 40x50 feet, used as a bark mill, and engine house. They employ 20 hands, turn out about 40,000 sides per year, and do a business of about $150,000. Steam power is supplied by an upright engine of 30 horse power, built by George L. Newcomb, of Salem, Mass., with a flue boiler of 35 horse power, built by James Tetlow. Office and Salesrooms No. 100 Congress street, Boston, Mass.

R. S. D. Symonds occupies a 3½ story wooden building 30x65 feet, located on Spring street, for the manufacture of upper leather; commenced business in 1851; turns out about 500 sides per week and does a business amounting to about $150,000 per year. Steam power supplied by an engine of 10 horse power with a flue boiler of 20 horse power built by the Putnam Machine Co. of Fitchburg, Mass.

Steward & Bacon occupy a 3 story wooden building 35x75 feet with an L 30x100 feet, located corner of Wallis and Walnut streets, where they employ 30 hands in the manufacture of upper leather, turn out 400 sides per week, and do a business of $125,000 per year. Business established in 1867. Steam power is supplied by an engine of 10 horse power with a tubular boiler of 50 horse power, built by Cunningham.

Thomas J. Relihan, tanner and currier, occupies a number of wooden buildings as follow: 1st, 2 stories 30x80 feet, used as a currying shop; 2d, 1 story 28x60 feet, used as a tannery; 3d, 1 story 28x70 feet; 4th, 25x60 feet, used as beam and lime houses; also out buildings, sheds, &c., covering pits and vats, the whole occupying an area of 25,000 square feet. The business was established in 1857; gives employment to 10 hands turning out about 30,000 sides of leather per year, worth about $120,000.

Balcom, Jennings & Co. occupy a shop in a 3 story wooden building 30x60 feet, located on Washington street, for the manufacture of stationary engines, mill work, shafting, gearing, tanners' and curriers' machinery, &c. They commenced business in 1867, and give employment to 10 hands.

Danvers Manufacturing Co. was established in 1847, and incorporated in 1863, with a capital of $100,000. The enclosure occupied by them covers an area of about 4½ acres upon which are the following buildings: a 3½ story stone building 55x155 feet, for bleaching and dyeing; a 1 story wooden building 50x100 feet, also for dyeing; a wooden building, 1 story, 30x120 feet, for napping cotton flannel; a boiling house, of wood, 1 story, 30x130 feet, and a drying house, 2 stories, 30x150 feet, with an ell 30x120 feet, built of wood. Also, a finishing house, 1 story, 30x80 feet, a carpenter and machine shop, 2 stories, 20x80 feet, and a blacksmith's shop, 1 story, 24x30 feet. There is also an ell to the main building, 1½ stories high, 30x70 feet, used as an engine and boiler house. The business of this establishment is the bleaching, dyeing and finishing of cotton cloths and flannels. The number of hands employed is 125, and the quantity of goods turned out is about 1,000,000 yards per month. Their motive power consists of an engine of 175 horse power, built by Seth Adams & Co., with 12 cylinder and 2 tubular boilers of about 400 horse power combined.

Dole & Osgood, occupy a 3 story wooden building, 30x130 feet, with a wing 2 stories high, 30x64 feet, located on Washington street, for the manufacture of light and heavy express wagons, sleighs and pungs and heavy drays and carts. They give employment to 26 hands, and do business to the amount of $25,000. Their machines, 20 in number, consisting of planing, boxing, mortising, tenanting, turning, drilling, gig and circular sawing machines are driven by an upright engine of 12 horse power, built by Holmes & Robins of Gardiner, Me., with a tubular boiler of 20 horse power, built by the Atlantic works of East Boston, Mass.

Hardy & Osgood occupy 2 floors of a 3 story wooden building 25x75 feet, located on Lowell street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1852, employ 30 hands, turn out about 30,000 pairs per year, and do business to the amount of about $40,000. Office and salesrooms, No. 90 Milk street, Boston, Mass.

The Essex Glue Co., of Peabody, Mass., is the oldest establishment of the kind in the United States, having been established by Elijah Upton in 1809. They employ 20 hands and turn out from 400,000 to 500,000 lbs. per year.

Edward Fuller occupies one-third of a 3 story wooden building 36x72 feet, located in the rear of Main street, for the manufacture of ladies', misses' and children's boots and shoes. He commenced business in 1838, employs 50 hands and turns out about 40,000 per year, worth about $60,000.

Francis Dane & Co., manufacturers of ladies', misses' and childrens' boots and shoes, commenced business in 1850. They employ 50 hands, turn out about 150,000 pairs per year, and do business to the amount of about $200,000. They occupy a three story brick building, 50x60 feet, located corner of Foster and Lowell streets. Their machinery is driven by an engine of 8 horse power, built by Lewis Osborn of East Boston, Mass., with a flue boiler of 20 horse power, built by the Atlantic works of East Boston, Mass. Office and Salesrooms No. 90 Milk street, Boston, Mass.

Timothy O'Shea occupies about 7,000 square feet of land, on which are five buildings, used for grinding bark, currying, &c. Mr. O'Shea commenced the manufacturing of leather in 1848. His works are situated on Grove street. Employs 50 hands, and produces 600 hides per week. His motive power is furnished from a 60 horse engine, built by George L. Newcomb, of Salem, Mass. Steam from a tubular boiler, 65 horse power.

Egan & Newell commenced business in 1862, for the manufacture of kid, goat and morocco leather, occupying a 2½ story frame building 50x30 feet, situated on Grove street. Employ 6 hands, and turn out 50 dozen skins per week.

P. L. Winchester commenced business in 1862, for the manufacture of hard and soft soap of all kinds, works located on Grove street, in a 2 story frame building 40x25, have 2 employees, turning out 300 gallons soft soap and 2,000 lbs. of hard soap per week.

E. P. Goldthwait commenced business in 1845, for the manufacture of inner soles, shoe stiffenings and heels, occupying a 2 story frame building 40x18 feet, with wing 100 x30 feet, situated at No. 159 Main street. He employs 20 persons, turning out 3,000 soles, &c., per week.

John G. Burbeck occupies a 2 story frame building 70 x26 feet, situated on Grove street. Mr. B. commenced the manufacture of bard and soft soap in 1860; employs 3 hands, and does a business of about $40,000 per annum.

Sutton's Mills, situated on Main street, at No. 142, in a 3 story frame building, 110x28 feet. The Sutton Mills Company prepare wool for their mill at North Andover, Mass. They employ here 14 hands, run an engine of 7 horse power, built by Cobb & Son, of Cambridgeport, steam furnished from a flue boiler, built by Joseph Haslam, of Salem.

Pinder & Winchester, commenced business in 1867, as tanners and curriers of leather, occupying 1½ acres of ground on which are situated the following buildings: tannery,

BROWN & STILES,
Manufacturers of all kinds of
MEN'S & WOMEN'S LASTS AND PATTERNS.
SPRING STREET, PEABODY, MASSACHUSETTS.

75x50 with a wing and beam house attached 125x32; currying shop, 3½ stories of wood, 90x28 feet; wing 40x28 feet, 2½ stories, located on Main and Grove streets. Employ 45 persons, and do a business of $300,000. The motive power is furnished from a 17 horse engine, built by the Westford machine works, steam furnished from a flue boiler, built by James Tetlow, of East Boston.

G. & A. B. Clark, manufacturers of morocco and colored skins, commenced business in 1866, occupying a two story building 90x40, 2 story L 30x19, for finishing leather; tannery 50x24, 4 stories frame. They employ 14 hands, turning out on an average 200 dozen skins per week. Machinery driven by a 6 horse power engine built by George L. Newcomb of Salem. The buildings are heated by steam from a tubular boiler of 15 horse power, built by Joseph Haslam of Salem. This boiler also furnishes steam for the engine.

Oscar Phillips. In 1850, Lewis Allen, commenced the manufacturing of women's pegged shoes. In 1868, Mr. P. succeeded to the business; he occupies a 3 story brick building 65x40, situated at Peabody Square; employs 20 persons, and manufactures principally for the Western trade.

Joseph Jacobs, manufacturer of leather, commenced business in 1828. His works are located on Foster street, and consists of the following buildings: Steam mill for grinding bark, &c. 110x33, L 40x24; curry shop 40x24; beam house 75x30; lime house 60x20; has 10 employees: motive power furnished from an engine of 20 horse power, built by Hinckley & Dreury of Boston, 2 flue boilers built by Hinkley & Dreury, furnish steam for engine, heating, &c.

A. H. Sanger, Jr., occupies a three story brick building, 55 x 45 feet, located in the rear of Lowell street, for the manufacture of wax leather, commenced business in 1866; has 6 employees, and turns out monthly 1000 sides; runs an engine of 8 horse power, built by H. F. Litchfield, at East Boston, Mass., with one tubular boiler 20 horse power, built by Joseph Haslam, of Salem, Mass. Does a business of $40,000 per annum.

O. F. Adams, currier, occupies a 3 story wooden building 45x30 feet, located on Foster street, for the manufacture of wax leather, commenced business in 1856, has 12 employees, curries 10,000 sides of leather per annum, and does business to the amount of $30,000.

J. E. Osborne, occupies a 3 story wooden building, 75x30 feet, located on Spring street, for the manufacture of stiffenings, inner soles, and heels, commenced business in 1860, and employs 20 hands.

E. S. Flint & Co. occupy a 3 story frame building 50x 25 feet, located on the corner of Foster and Spring streets, for the manufacture of inner soles, stiffenings, heels, &c., commenced business in 1860; have 20 employees. An engine of 15 horse power built by George L. Newcomb, of Salem; with steam from a flue boiler, built by Joseph Haslam, of Salem, furnishes the power.

Merritt & Cook occupy a 3 story frame building 50x26 feet, located on Foster street. Messrs. M. & C. commenced business in 1861, as curriers and finishers of leather; employ 3 hands and do a business of $40,000 per annum. The building is heated by steam from a tubular boiler, built by James Cunningham, of Charlestown. This boiler also furnishes steam for a 5 horse power engine, built by S. E. Chubbuck & Sons, of Boston.

J. C. Farewell & Co. commenced business, in 1861, for the manufacture of ladies', misses' and children's boots and shoes; occupy a 3 story frame building 50x30 feet, situated on Lowell street. Have 50 employees, turning out 1,200 cases boots and shoes per annum. Business amounts to $100,000.

Isaac Munroe commenced leather manufacturing in 1845; employing 7 hands, and producing 6,000 hides per annum. Engine of 10 horse power, built by George L. Newcomb, of Salem, drives the machinery; flue boiler, by Isaac Adams, of Boston.

Upton Glue Factory comprises the following buildings, respectively: main building, 400x25 feet, built of wood, four and six stories high, to which is attached an ell, 100x75 ft.; also, a vat building, engine and boiler room, 75x75 ft. where is manufactured every quality of glue, from common sizing to nice bonnet glue. The business was commenced in 1860, and gives employment to 30 hands, and produces 150 tons of glue annually. Their machinery is driven by an engine of 10 horse power, built by George Upton, of Peabody, with four boilers of 150 horse power combined, which in addition to supplying steam for the engine, heat all the buildings. Do business of $65,000 per annum. Office and salesroom, No. 51 Kilby street, Boston, Mass.

Brown & Stiles occupy a 2 story wooden building 45x 32 feet, located on Spring street, where they manufacture boot and shoe lasts and patterns, employing 7 hands and turning out 50,000 per year. The business was established by a Mr. Brown in 1833. Their machinery is driven by an engine of 8 horse power, with 1 tubular boiler 10 horse power, built by George L. Newcomb, of Salem, Mass.

George P. Osborn & Co. commenced in 1832, as manufacturers of slaughtered leather. Office on Milk street, Boston. Their works are situated here on the Lowell Branch of the Eastern Railroad, occupying several buildings as follows: Tannery, 75x75, 1 story, with L, 120x40, 1 story; currying shop 25 x 125, 2 stories, frame, and mill for grinding bark and beating hides 100 x 28, 2 stories, wing attached 32 x 28, besides store houses, tan sheds, &c., covering about 80,000 square feet. Messrs. O. & Co. give employment to 93 persons, and turn out 1,800 sides per week. Their machinery is driven by a 25 horse engine, built by George L. Newcomb, of Salem; steam furnished from 2 cylinder and 1 tubular boilers of 80 horse power combined.

S. A. Southwick occupies a 2 story frame building 50x 50 as a currying shop, a dry house 35x20 feet, located on Grove street. Mr. Southwick commenced the currying of leather in 1855. Has 9 employees, and finishes 350 sides per week.

Franklin Tyler commenced business, in 1861, for the dressing of morocco of all kinds, on Grove street, occupying a 2 story frame building 54x25. Employs 7 hands, and produces 75 dozen skins per week.

Luther Fernald & Co. commenced business in 1854, currying leather, occupy a 3 story building 84x25 feet,

situated on Foster street. Employs 20 hands, and produce 40,000 sides per annum. Machinery driven by an 8 horse power engine, built by Mr. Bradford, of New Bedford. Steam furnished from a flue boiler of 20 horse power.

N. W. Osgood occupies a 2 story wooden building for tanning of leather, commenced in 1840. Employs 6 hands, turns out 10,000 sides per annum.

Brown & Caller, manufacturers of leather, commenced business in 1866. They occupy the following buildings: Tannery, 150 feet by 60 feet, 1½ stories: beam house, 150x60 feet, 1½ stories; rolling and bark mills, 100x40 feet, 2 stories; currying shop, 150x28 feet, 3½ stories high. They employ about 100 men, and manufacture 100,000 sides of leather annually. The power is furnished as follows: three boilers at tannery, of 20 horse power each; one engine at tannery, 40 horse power; two boilers at currying shop, 20 horse power each; one engine in currying shop, 20 horse power. They use about 2,000 cords of bark, and equal to 1,500 cords of bark in bark extract, and some gambier. They have in use four splitting machines, one scouring machine, five glassing machines, and one bouding machine.

Wm. H. Brown, manufacturer of glue. Glue making was first commenced in 1820, by Thomas Brown in Marblehead, Mass. Mr. B. while boiling out some fleshings for the grease discovered there was a certain part of glue in them and immediately commenced the manufacture of this article which has since been a source of wealth not only to the manufacturers, but to the tanners, who previous to this discovery generally threw the fleshiugs into the streams. This was the first glue factory established in New England. The business was removed to Peabody in 1854, when Thos. Brown, Jr., became a partner. The factory is 100 feet long, 3 stories high; boiler house 80 feet long, 1 story, with large buildings for stock and to cover vats, &c. Employs 12 hands and in busy seasons 16; capacity for manufacturing 2,000 bbls. per year. He has many large tanks for boiling the glue by steam direct from the boilers, and a beautiful machine for cutting it in slices, invented and patented by Mr. B. himself. The power is derived by a 15 horse engine and steam furnished from tubular and flue boilers.

J. H. Poole established and commenced the manufacturing of morocco leathers in 1851, in a small way. He has since increased his business and now occupies a building 150 x 24 feet, 4 stories, using a 12 horse engine for driving machinery used in tanning, and 4 machines for softeuing and glazing leathers; consumes about 100 tons anthracite coal per year. Employs 18 hands, turning out 100 dozen finished sheep skins, in all styles, for various purposes, but principally as boot and shoe stock. Does a business of about $100,000 per annum.

Nelson & Merrill, tanners and curriers, established business in 1849. They occupy in the currying department 2 buildings—one 100x30 feet, 2½ stories; the other 153 x 26 feet, 2 stories. Building used as a tannery, 138 x 45 feet, 1 story. Two store houses,—one 50 x 48 feet, 1 story; the other 30x30 feet, 2 stories. They employ 30 hands, manufacture wax, kip and split leather, and do business to the amount of $150,000 per annum. They use a 50 horse power boiler for heating and driving a 15 horse power engine, both made by Louis Osborn, of East Boston.

PEPPERELL, 36 miles from Worcester and 10 from Nashua. An enterprising village on the Worcester and Nashua Railroad, of about 2,000 inhabitants, containing 2 churches.

The town of Pepperell is situated across the Nashua from the station, which is in the town of Groton.

H. A. Parker & Co., manufacturer of paper, wadding and batting; established in 1860. They occupy two buildings. Paper mill, 75x25, with wing 30x22; the wadding and batting mill is 30x50, with wing 150x16. The power is furnished by two engines of 20 horse power and five water wheels manufactured by Blake Bros., of this village, averaging 15 horse hower, and one of Chace's turbine water wheels, manufactured by the Excelsior Turbine Water Wheel Co., of Orange, Mass. They employ 25 hands, consume 1 ton of stock, (rags and waste paper,) and 60 cords of wood, per day; and produce 1,200 tons of paper, 500 dozen sheets of wadding and 1,000 lbs. of batting per day.

Blake Brothers, this business was established by Blake & Ballord, in 1836. In 1860 it took the name of L.W. Blake & Sons, and in 1865 the present title of Blake Bros., machiuists and mill wrights. Principal business for the past 20 years has been the manufacture of Blake's Patent Water Wheels, mill work, repairs, &c. Within two or three years particular attentiou has been paid to the manufacture of Blake's Belt Stud, for which patents were secured in 1860–1861 and 1868. This belt stud they manufacture exclusively for Green, Tweed & Co., New York. It is one of those simple articles which leave no chance for improvement. It makes a perfect fastening, and the constant increase of sale proves it to be highly appreciated by the public. Ten tons of brass plates was used during the past year in these studs.

Blake's Water Wheel with its improvements, is considered (by those versed in such things,) as one of the very best wheels now in the market. They employ in their machine shop 20 hands, and in their saw and grist mill 6 hands. They have now in use to drive their works, seven water wheels of their own manufacture, which furnishes a power equal to 125 horse.

PERRYVILLE, 18 miles from Worcester, 42 from Norwich, a flag station on the Norwich & Worcester Railroad. The only manufactory here is that of

Jos. H. Perry's Sons, who commenced the manufacture of fancy cassimeres at this place, in 1863, being successors to Joseph Perry, the father, who established the business in 1830. The mill is a few rods of and in sight of the depot, on the French river. It is 150x40 feet, 3 stories, and attic with dye house, &c., attached 100x25 feet, 2 stories, an office and store room in front. The main building is of wood, the dye house, &c., of stone. The mill contains 5 sets of wool machinery, 30 narrow looms, 2,000 spindles. Employ 100 persons; consume 1,500 pounds of wool, producing 700 yards per day; 2 Tyler, 5 feet, turbine wheels furnishes the power, the fall being 10 feet and can be made 14 easily. Josiah Perry conducts the business under the above firm name, being the only son living.

PHELPS MILLS, 17 miles from Lowell and 7 from Salem, a station on the Salem and Lowell Railroad.

PITTSFIELD, 151 miles west from Boston, and 50 east from Albany, on the Boston and Albany Railroad. The Indian name, Pontoosuck, was settled in 1736. The town of Pittsfield is finely watered by two branches of the Housatonic, which unite near the centre. The village of Pittsfield is larger than some of our cities, and is one of the pleasantest in New England; it lies 1,000 feet above the level of the sea, in a fertile val-

ley, between the Taughkannick and Green mountain ranges. It contains many fine and beautiful public and private buildings, which with the fine scenery and well cultivated farms that surround it, presents a great variety to charm the eye and to gratify the taste of the intelligent agriculturist. This town was incorporated as Pittsfield in 1761. It has a population of 12,693; 8 churches and 3 banks. The Berkshire Medical School, founded in 1823, is located here; also, the Young Ladies' Institute. Contains 3 hotels; 2,293 polls; total personal estate, $3,473,061; real estate, $4,693,173; number of acres, 23,599; rate of taxation, 1 per cent.

MANUFACTURERS.

Wm. Clark commenced the machinists business in 1868, as successor of J. W. & H. C. Clark, who established the business several years ago, on Depot street. Mr. Clark is builder of the Granite Sewing Machine, hires room and power from Messrs. Clary & Russell, room 30x40.; Employing fine hands and turning out 65 machines per year. His machines consist of two engine lathes, one milling machine, one upright drill, and one wood lathe.

Duckworth & Sons, manufacturers of Duckworth's patent fancy broad looms; also, cotton and woolen looms of all kinds. Commenced business in 1863, near the old passenger depot; building 180x60, three stories; employing 25 hands, and manufacturing on an average, 10 broad looms per month. Using to run his machinery, a 20 horse power engine of the American Machine Co.'s make, with tubular boiler made by Campbell & Whittier.

In 1868, Clary & Russell commenced the manufacture of boilers, steam engines, &c. The business was established 25 years ago by Gordon & McKay, on Depot street. The names and dimensions of their buildings, are as follows:

No. 1, machine shop, 600x40, three stories and basement. No. 2, do. do. 80x30, two stories. No. 3, foundry and blacksmiths' shop, 100x30, one story. No. 4. boiler shop, 150x30, one story. The motive power is derived from a 15 horse power engine, with two flue boilers, built by themselves. They employ bout 40 hands.

A. Lang commenced the making of boilers in 1858, on Beaver street. His building is 40x50, one story; employs 12 hands, making 10 boilers per year.

Owen Coogan commenced the manufacture of card, belt, harness and shoe leather, in 1850. His factory is situated on East Housatonic river, and is 150x34, two stories, with wing 75x24, two stories with basement. Mr. C. employs 30 hands, and turns out about 10,000 hides per year, using 1,200 cords of bark, 30,000 lbs. tallow and oil. He uses a 30 horse power engine with tubular boiler, built by Clary & Russell.

Among the establishments which has grown with the city is the cotton factory of M. Van Sickler. In 1849, Plunkett, Clapp & Co., established a cotton manufactory on the East Housatonic river, and run it for several years. In 1866, Mr. Van Sickler bought it and he now runs 3,500 spindles; employing 100 hands and making 100,000 yards cloth per month using about 30,000 lbs. cotton; power derived from a 100 horse turbine wheel. His picker is in a building separate from the main factory, being 30 feet square, while his factory is 120x40, 4 stories; store house 60x20, 1 story.

J. Clapp & Son. In 1810, Mr. Jason Clapp commenced the manufacturing of all kinds of carriages in the rear of West street, and continued until his death, which occurred Oct. 1868. The carriage presented to President Pierce, by some of his friends in Boston, was made by Messrs. Clapp & Son, and has been pronounced by good judges to have been equal, if not superior in fine workmanship, to any carriage in America. Their buildings with the necessary yard room, cover more than an acre of ground. They employ 25 hands and turn out 50 carriages per year.

E. Dunham, manufacturer of light carriages, commenced business in 1835; employs 12 hands and turns out about 30 carriages per year. He occupies 4 buildings as follows: No. 1, 50x22, 2 stories, woodwork, trimming shop and painting; No. 2, 40x20, 2 stories, painting; No. 3, 50x18 1 story, repository; No. 4, 40x24, 1 story, blacksmith's shop.

L. Pomeroy's Sons, manufacturers of woolen cloths and satinets. The business was established in 1820, by Lemuel and Josiah Pomeroy and others, under the name of the Pittsfield Woolen and Cotton Factory. They employ 225 hands, running 11 sets cards, 80 looms, and using 6,000 lbs. clean wool per week, turning out 5,000 yards cloth 6-4, 5,000 yards satinets 3-4 per week. The motive power is furnished by a 100 horse power turbine wheel.

E. B. Whittelsey commenced business in 1864, for the manufacture of woolen cloths, runs 2 set cards, 12 looms; employs 25 hands. He uses 1,500 lbs. clean wool per month and turns out 10,000 yards per month; motive power derived from a 15 horse Burden's engine with tubular boiler.

Thomas Colt, established in 1851; manufactures collar paper. He occupies one building of stone and brick, 100 ft. long and 50 feet wide, 3 stories and attic, with a lean to 27 feet wide and 75 feet long; also boiler house of brick. All buildings covered with slate. Manufactures 300 tons of paper per annum. Has 3 water wheels, under 14 feet fall, and 2 auxilliary steam engines of 25 and 60 horse power each, both McKay engines. Nearest railway stations are Pittsfield, on Boston & Albany Railroad, and Coltsville, on Pittsfield & North Adams Railroad. His Post Office address is Pittsfield. There are connected with the mill 2 artesian wells—one 250 feet and one 500 feet deep. Both together furnish to the mill 400 gallons per minute of the purest spring water.

Wahconah Woolen Mill, established in 1864, T. G. Atwood, Proprietor; L. R. Abbe, Sup't. Occupy a 3½ story stone mill, 50x80 feet, with picker house, &c., and manufacture balmoral skirts, flannels, meltons, &c., employing from 30 to 35 hands. Run two sets cards, three jacks, 18 broad looms, and produce from 250 to 300 yards per day. A 24 inch Tyler wheel drives the machinery, the fall being 18 feet.

Steavesville Woolen Co. commenced business August 14, 1866, for the manufacture of black union cassimeres. The buildings occupied by them are as follows: one mill 120x44 feet, boiler and dye house, 20x30 feet, one brick picker house, one machine shop, one saw mill and one brick store, and 29 tenements. They employ from 50 to 60 hands, run 4 sets of machinery, 32 looms, 1300 spindles, producing 230,000 yards annually. They have a 50 horse power engine, made by Cleary, Sedgwick & Russell. The mill is situated on a western branch of the Housatonic River, having a fall of 32 feet. Amount of business yearly, $250,000. Capital stock, $100,000.

Pontoosuc Woolen Manufacturing Co. manufacture balmoral skirts, carriage and car blankets, &c. The main building occupied by them is 145x48 feet. They employ 200 hands, run 75 broad looms and 10 sets of cards, and do a business of $450,000 annually. The factory is located at the outlet of Pontoosuc Lake, with 20 feet fall of water. Thaddeus Clapp is Agent and General Manager.

PITTSFIELD JUNCTION, 149 miles from Boston and 52 from Albany, at the junction of the Boston & Albany and Pittsfield & North Adams Railroads.

PLYMOUTH, 37½ miles from Boston, at the teminus of the Plymouth Branch of the Old Colony & Newport Railroad. This town is full of interest, it being the oldest settlement by Europeans in New England, and the landing place of our forefathers on the 22d of December, 1620. The Indian name is Pantexet. The land is generally hilly and sandy, although there is a track bordering on the sea coast that is capable of yielding large crops. The town is watered by Eel and Wonkinqua rivers. The corner stone of Pilgrim Hall was laid here Sept. 1st, 1824. It commands a full view of the river and harbor. The anniversary of the landing of the Pilgrims was commenced December 22d, 1769, and will, we trust, be continued in this hall "till time shall be no more." Plymouth had (in 1869) 12 churches, 2 National and 1 savings banks. No. of children attending school, 1,263; dwelling houses, 950; families, 1,387; Valuation of real estate, $1,954,650; Valuation of personal property, $1,262,475; Rate of taxation, 68 cents on $1,000; No. of polls, 1,516; horses, 362; cows, 426; sheep 402; acres of land taxed, 46,641. Population, 6,300.

The Russell Mills are situated in Chittonville, a very beautiful village near Plymouth Beach, commemorated as the landing place of the Pilgrims. Chittonville coutains 1,000 inhabitants; also the famous Clifford House, which commands a fine view of the surrounding village and various other places of resort. The Russell Mills were established in 1854, with a capital of $125,000, for the manufacture of cotton sail duck. They occupy several buildings, the main one of which is 2 stories high, and 184x60 feet. They employ from 80 to 100 persons, running 52 looms and 3,584 spindles, consuming 159 bales or 75,570 lbs. of cotton monthly, producing in the same time 60,117 yards of duck. The power is derived from a 120 horse power engine, of Ferguson's patent, made by Lazelle, Perkins & Co.; also, from 4 tubular boilers; one Leffel water wheel 35 inches in diameter, and 31 feet head, drives the whole mill when they have a good run of water, the steam engine being used only as an auxiliary to the water power. D. H. Gilbert is Superintendent of the mills.

Eagle Hill Stave Co., about the year 1835 Mr. Lewis Kenney built here, for the purpose of the manufacture of staves, and employed Mr. Thomas Peirce to run his mills for him. This mill was burnt in 1853, and was rebuilt by Thomas Peirce, Esq., who still continues the business. Mr. Peirce employs about 20 hands. Power is furnished by a water wheel, called the Warren water wheel, manufactured in Vermont. The company cousume, in the manufacture of staves, about 400 cords of wood, and 1,400,000 staves per year.

Conb & Drew manufacturers of copper, brass and iron rivets, common and Swedes Iron, leathered earpet, lace and gimp tacks; finishing, Hungarian, trunk, and cigar box nails, &c., &c. This firm was established in 1860. They occupy 3 buildings; power is furnished by 2 Leffel water wheels, together 50 horse power. They do an extensive business, and the different articles manufactured, take a foremost rank of their kind.

Plymouth Mills. This company was incorporated in 1844. The officers are as follows: President, Jacob H. Loud, Esq., (State Treasurer of Massachusetts,) and Jeremiah Farris, Esq., agent. The capital of this company is $846,000. The power is furnished by 1 turbine wheel, built by them, and 1 breast wheel. They employ about 25 hands and do a business of about $150,000 per year.

E. & J. C. Barnes, Proprietors of Plymouth Plaster and Planing Mills. This firm commenced business here in 1864. They employ about 12 hands and consume 200,000 feet of box boards for manufacture of boxes and 100 cords of logs for staves per year. They also manufacture calcined and farmers plaster, trunk woods, and packing boxes. Power is furnished by 2 turbine wheels, manufactured by Messrs. Ferris & Churchill of this place. This company do a business of from $20,000 to $25,000 per year.

Samuel Bradford, Jr., manufacturer of nail and rivet kegs. This business was established here by Mr. Samuel Bradford, Sr., about the year 1830. In 1858, his son, the present owner, took charge of the business. He produces at the rate of $30,000 per year.

Samuel Loring commenced the manufacture of tacks and rivets in 1842, at Ducksbury, Mass. In 1860, the Plymouth Tack Company was incorporated, and in 1863 Mr. L. bought out this company and commenced the manufacture of rivets here, in connection with tacks, &c. This was the first rivet manufactory in Plymouth. Mr. L. employs 78 hands, power is furnished by three water wheels, (one breast and two Leffel,) and steam engine manufactured by the Putnam Machine Co., of Fitchburg, Mass., of 100 horse power. These works consume four tons of tack and nail plate and rivet rods per day, and produce at the rate of 8,000,000 articles per day.

The great success of these works, is due to the energy and skill of Mr. Loring, from the fact, that he has for the most of the time carried on the business alone, and consequently possessed almost unequalled experience in this line of business.

Plymouth Iron Foundry. This company was incorporated in 1866 with William R. Drew, Esq. as President. Capital $60,000. They employ about 45 men, and manufacture the Sheridan and Sunrise Cook, Sheridan Ranges, and a large variety of Atlantic Cabooses, ranges, and vessels, stoves; also, all kinds of cylinder and box stoves, sinks and hollow ware. Power is furnished by a steam engine, manufactured by Wm. Burlingame, of New Haven. The foundry is built of brick, its dimensions are 185x50 feet, boiler and engine room adjoining. The works have a capacity of consuming from 900 to 1,000 tons of casting per year, and produce articles, unsurpassed in quality, in large quantities.

Samoset Mills, this company was incorporated in 1855, with a capital of $85,000. The officers are as follows: President, L. B. Russell, Esq., of Boston; Treasurer, E. Russell, of Plymouth, and T. S. White, Esq. Agent. The site of these mills was formerly occupied by a cotton cloth factory, which was built about the year 1812. It was rebuilt and again destroyed by fire about 1842. This company occupy 6 buildings. The main building used as factory, is about 90x 50 feet, a handsome wooden structure of 4 stories. They employ 125 hands. The power is furnished by one Leffel water wheel, 70 horse power, manufactured at New Haven, and one Corliss engine, 60 horse power.

This company consume about 200 bales of cotton per year, and produce on an average of 375,000 spools of thread of 200 yards each, during same period. They have a capacity for manufacturing 2,000 spools (of 200 yards each,) per day. They also occupy a building used as a machine shop, 3 stories 33x85, built of brick; also, a dye house, packing and storage rooms. This compauy do a business of $150,000 per year. Their agent for New York and Boston is Mr. Charles Francis, office 43 Park place, New York, and 56 Summer street, Boston.

PLYMOUTH WOOLEN AND COTTON CO. occupy a mill, 100x 40 feet, situated on Eel river, and manufacture 22 inch cotton duck. They commenced business in 1843; run 16 looms, 1,600 spindles, and consume 300,000 lbs. of cotton per annum. A 42 inch French turbine water wheel of 67 horse power drives their machinery, the river fall being 18 feet. Selling agents, Fearing, Rodman & Swift, Boston and New York.

PLYMOUTH WOOLEN MILL, established in 1863, is 175x55 feet, running 1,600 spindles and 24 looms; manufacture all-wool flannels, $\frac{3}{4}$ goods, plain, blue and orange; produce 1700 yards per day. The machinery is driven by a 50 horse power engine, built by the Taunton Machine Co.

PLYMPTON, 30 miles S. E. by S. from Boston, and 8 west of Plymouth, on the Plymouth brauch of the Old Colony & Newport Railroad. The Indian name was Wanatuxet. Population of the town, 1,000.

POND STREET STATION, five miles from Boston, and 6 from Lexington, a flag station on the Lexington and Arlington Railroad.

PORTERS, 3 miles from Boston, a station in the city of Cambridge, on the Boston and Fitchburg Railroad.

PRATT'S JUNCTION, 17 miles from Worcester and 9 from Fitchburg, on the Fitchburg and Worcester Railroad, at the junction of the Agricultural Brauch.

PROCTOR'S CORNER, 20 miles from Lowell and 4 from Salem, a station on the Salem & Lowell Railroad.

PROSPECT STREET, 2 miles from Boston, a station in the city of Cambridge, on the Boston and Fitchburg Railroad.

PROVINCETOWN, one of the most important towns on the Cape, having one of the finest harbors in the world, situated in the north of that portion of the Cape, which separates the waters of Cape Cod Bay with the Ocean. Provincetown contains 3,000 inhabitants, 3 churches, and 1 bank. It is situated 30 miles from Orleans, and 123 from Boston, via. Orleans.

QUINCY, 8 miles S. by E. from Boston, on the Old Colony & Newport Railroad. The surface of the town by the same name is diversified by hills, valleys and plains. Back from the bay about 3 miles is a range of elevated land, in some parts more than 600 ft. above the sea, containing an inexhaustable supply of grauite. This is the source of "Quincy Granite," a building material justly celebrated in all our cities for its durability and beauty. About 1,000 persons are employed in working it. The first railroad constructed in America was here put in operation in 1826, for transporting the granite to the tide waters of the Neponset river,—3 miles. The village is situated on high ground and contains 9 churches, a bank, insurance company and newspaper.

The *Mount Wallaston farm* is noted as the site of an early settlement (1625) and as the *merry mount* of Thomas Morton and his associates. This farm, with another, form the ancestral estate of the Quincy family, and comprises one of the most beautiful and well cultivated estates in New England. This town is celebrated as the birth place of John Hancock and Josiah Quincy, Jr., and the two Adamses. A stone church was erected in 1828, at a cost of $40,000, designated the "Adams Temple." Within its walls is a beautiful marble monument to the memory of the Hon. John Adams and wife. Quincy was named in honor of Col. John Quincy, a native of this place. Population of the town, 7,500.

JAMES E. MAXIM commenced business in October, 1864, for the manufacture of boots and shoes, employing 20 hands, and producing 15,000 pairs annually. Doing a business of $37,000.

T. CURTIS & Co., manufacturers of fine boots and shoes, commenced business 1830, and have 100 employees, doing business to the amount of $140,000 per annum. This firm have an office at No. 62 Milk street, Boston, Mass.

BADGER BROTHERS established business in the year 1855, under the name of C. L. & L. C. Badger, for the manufacture of patent hammers and stone tools generally, also of superior lifting jacks, &c. They occupy one building, 60x30 feet, with basement, and one room 25x10 feet. They employ from 5 to 8 workmen, doing a business of from $3000 to $6000 yearly. The power is furnished by an 8 horse power engine of Badger Bros. make.

J. T. PENNIMAN & Co. manufacturers of boots and shoes of the finest quality, (mostly custom work,) employ 20 hands, and do a business of about $20,000 per annum.

RANDOLPH, $14\frac{3}{4}$ miles from Boston, and $52\frac{1}{2}$ from Newport, a beautiful village situated between the two branches of the Old Colony & Newport Railroad, contains 3 churches and 1 bank. About $2,000,000 worth of boots and shoes are made here annually. An elegant town hall called Stetson Hall, in honor of Amasa Stetson, by whom it was presented to the town of Randolph, is an ornament to the town. It is 90 x 60 feet, and contains the Stetson High School, a flourishing institution for boys, endowed by the above gentleman. Population of the village about $4,500.

CHARLES H. HOWARD commenced business in 1861. He manufactures boots and shoes of the first quality for the New England retail trade. He occupies a 4 story building 40x 50 feet, employs 75 workmen, and produces 25,000 pairs annually. Amount of business $100,000.

ELISHA MANN, JR., established business in the year 1858, for the manufacture of fine calf boots, expressly for the retail trade of New England. He occupies a building 24x50 feet, employs 50 hands, and produces 1,500 cases of boots per year. Amount of business done per year is $80,000.

SAMUEL A. CAPEN, manufacturer of boots, commenced the business in 1861, under the firm of Odell & Capen. He employs 50 hands, runs 4 machines, and manufactures 2,118 cases of boots, valued at $92,000, every 2 years. He is now doing a thriving business.

ALEXANDER STRONG & Co. commenced the manufacture of boots and shoes in 1849. Their works is under the charge of their agent, Mr. S. French, who employs 110 hands, and produces $18,000 worth of goods monthly. They occupy a 2 story building, 36 x 62 feet, situated at No. 22 South Main street.

C. A. RICHARDSON & COMPANY,
Manufacturers of all kinds
INFANTS' BOOTS AND SHOES,
In Fancy Colors, in Leather or Cloth,
Office and Salesroom at Store of Wales Tucker & Co., 49 Pearl Street, Boston.
READING, MASS.
G. A. RICHARDSON, E. B. RICHARDSON.

RAYNHAM, 30¼ miles from Boston, 37½ from Newport, a small village on the Old Colony and Newport Railroad, in a town by the same name. Population of the town 2,000. The oldest anchor forge in the United States is situated in this town.

RAY'S STATION, situated 35½ miles from Boston, 2¾ from Woonsocket, and 18¼ from Providence, a village in the town of Bellingham, of about 400 inhabitants, on the Woonsocket division of the Boston, Hartford and Erie Railroad.

READING, is a post township in Middlesex County, situated about 13 miles north of Boston, on the Boston and Maine Railroad. It is twelve miles west of Salem, twelve miles south of Lawrence and fourteen miles southeast of Lowell. The town was first settled in 1640, and incorporated in 1644. The present population is about 3,000. Number of voters 613. The valuation of real estate, $1,018,677. That of personal estate, $299,572. Total $1,318,249. Rate of tax, $1.55 per $1,000. Number of acres of land taxed in the town, 5,729. Number of dwelling houses, 500. There are five churches — two Orthodox Congregationalists, one Baptist, one Methodist and one Universalist; 14 schools—1 high, 4 grammar, 2 intermediate, 4 primary and 3 mixed. Number of scholars, 513. 14 trains daily each way to and from Boston, pass through Reading, on the Boston and Maine Railroad; most of them stop at the station.

G. A. Richardson & Co. are among the largest manufacturers of infants' and children's shoes in the United States, making a specialty of this branch of business, and employing accomplished artizans. Their style is unexceptionable. They occupy one building with necessary workmen for producing shoes enough to supply a large trade throughout the country.

Damon, Temple & Co. occupy a shop in the 2d story of a large brick building known as the Bank building, located on the corner of Main and Pleasant streets, for the manufacture of gentlemen's neck ware, such as scarfs, ties and bows. They employ about 100 hands, mostly women. Very little of the work except the cutting, (which is done by men,) is done in the shop, it being sent out or carried home by the girls who do the work. The business was established in 1866. Office No. 72 Summer street, and No. 28 Otis street, Boston.

Holden Bros., occupy a 2 story wooden building, 14x40 feet, located on Main street, for the manufacture of misses' and children's shoes. Commenced business in 1845. Employ 35 hands.

Alden Batchelder occupies a 2 story wooden building, 30x40 feet, one 2 stories, 24x34 feet, another 2 stories 24x34 feet, located on Salem, corner Pearl street, for the manufacture of bureaus, secretaries, sideboards, looking glass frames, &c. Commenced business in 1865, employs 8 hands, consumes 150,000 feet of lumber, and does a business of $15,000 per annum.

Charles Manning, occupies a 2 story wooden building 22x28 feet, also a 2 story building 16x20 feet, located on Manning street, for the manufacture of bureaus, secretaries, &c. Commenced business in 1849, employs 2 hands, consumes 15,000 feet of lumber and does a business of $5,000 per annum.

Francis Kingman occupies a two story wooden building, 25x30 feet; two other buildings two stories each, 24x36 ft., and a store house 24x30 feet, located on Manning street, for the manufacture of bureaus, secretaries, wash stands, &c.; commenced business in 1837. Employs 7 hands; consumes 60,000 feet of lumber, and does a business of $12,000 per annum.

The manufactory of Parker & Sleeper is located on Salem street, where they occupy a two story wooden building, 24x151 feet; another, two stories, 98x33 feet, for the manufacture of furniture and all kinds of veneered work, in sets. The business was commenced in 1857, under the firm name of M. D. Berry & Co., and under present firm name in April, 1858, Mr. M. D. Berry being one of the present firm. They give employment to 60 hands. Their machinery is driven by a portable steam engine, 60 horse power, built by J. C. Hoadley & Co., of Lawrence, Mass. They consume 500,000 feet of lumber, and do business amounting to $100,000 per annum. Office and salesroom, No. 10 Traverse street, Boston.

S. Harnden & Son occupy a 3 story wooden mill 25x85 feet with an L 25x20 feet, work shop 35x25 feet, 3 store houses, each 2 stories, and 25x60 feet; another store house 2 stories 25x80 feet, located on Main street for the manufacture of refrigerators and furniture; also, have a saw mill 40x20 feet, for sawing the lumber. Their machinery is driven by an engine of 30 horse power, built by Campbell, Whittier & Co., of Boston, with 1 flue boiler, built by Mr. Snow, of East Boston. They consume from 25 to 30,000 feet of lumber, and turn out 3,000 refrigerators, and do a business of $75,000 per year. Office 14 Canal street, Boston.

Foster & Perkins occupy a 2 story wooden building 45x25 feet, located on Woburn street for the manufacture of children's shoes. Commenced business in 1865. Employ 50 hands; turn out 250 to 300 pairs per day.

Dinsmoor & Grouard established business in 1849. They occupy, for the manufacture of parlor desks and chamber sets, the following buildings: one 30x50, three stories; two 36x22, two stories, and four sheds and store house. Employ 30 men, consume 100,000 feet lumber, and do a business of $40,000 per annum. The machinery used is varied, such as splitting, squaring, and spitting saws, jig and cylinder saws, and Daniel's planer, jointer and moulding machine. The motive power to drive their machinery is furnished by a steam engine of 15 horse power, made by Otis Tuffts, Boston, Mass.

Samuel Pierce occupies a 2 two story wooden building 24x150 feet; packing room 16x24 feet; store house, 2 stories,

SAMUEL PIERCE,

SALEM STREET, READING, Mass.,

MANUFACTURER OF

ORGAN PIPES.

—ALSO—

REED PIPES,

Voiced in a superior manner.

☞ Organ Builders furnished with all kinds of METALLIC PIPES at the shortest notice. ☜

40x40 feet, located on Salem street, for the manufacture of organ pipes; the business was commenced in 1848, and gives employment to 25 hands. He consumes about 10 tons of zinc, 3 tons of block tin, 8 tons of lead and 500 lbs. of brass, with 15,000 to 20,000 feet of lumber for making his packing boxes per year; does a business amounting to $25,000 per annum.

READVILLE, 8½ miles from Boston, on the Boston and Providence Railroad, a small village located half a mile from the depot.

THE SMITHFIELD MANUFACTURING CO. was incorporated with a capital of $300,000. Earl P. Mason, President, Henry Waterman, Secretary and Treasurer. This company occupy two mills on a branch of the Charles river. The "old mill" is built of wood, 3 stories. A new brick mill was erected in 1865. It is 150x60, 4 stories, 2 Leffel wheels and a 125 horse power Corliss engine supplies the power. They employ 150 persons; run 10,800 spindles; 220 looms; consume 6,500 pounds of cotton weekly, and produce 50,000 yards of 39 and 28 inch 52x60 and 56x60 print cloths and paper cambrics. Geo. E. Sherman, agent. Office in Providence, 8 South Main street.

RICE'S CROSSING, 12½ miles from Boston, and 31½ from Worcester, a station on the Boston and Albany Railroad.

RICHARDSON'S ROW, 9 miles from Boston, a station on the Woburn branch railroad, in the town of Woburn.

J. P. CRANE & CO., manufacturers of all kinds of harness leather, in 1867 succeeded to the business which was established in 1864, by J. P. Crane. Main building, 50x30, 3 stories, used for drying and finishing rooms. Tannery, 60x35, 1 story, containing 30 vats. Beam house, 60x35, 1 story, contains 10 vats. Tan house 20x40, 12 feet posts. Have 4 leachers holding 2 cords bark each, filled by conductor from bark mill, by poor extracts which flow from a pipe from leachers to mill, returning through this conductor back to leachers; 2 junks holding 5000 gallons liquor each, and 1 cooler. These works are on the right hand side of track from Woburn to Boston. They employ 20 hands, and consume 520 cords of bark, from 6 to 8 tons Gambia, and half ton Sumac per year. Tanning 5,200 slaughtered hides per year. The motive power is furnished from a 12 horse engine, made by J. P. Shelby, furnished with steam from a tubular boiler.

RICHMOND, 41 miles from Albany, 61 from Springfield and 159 from Boston; a station and town on the Boston and Albany Railroad. The town is situated in a deep valley of excellent soil, surrounded by elevated lands, and watered by Williams river. This is an excellent farming town, the farmers' houses, extending several miles on one street, are neatly built, and make a beautiful appearance. Iron ore is found here.

RIVERDALE, 13¼ miles from Worcester and 29¾ from Providence. A flag station of 14 houses on the Providence and Worcester Railroad. Has one mill, called the Riverdale Mill, Paul Whitin, proprietor; Charles E. Whitin, agent. Office at Whitinsville. The mill is 38x260 feet, 2 stories, built of brick with stone basement. They run 5,500 spindles, 120 looms, consume 4,500 pounds of cotton, and produce 16,000 yards of 40 inch fine cotton sheetings per week, employing 62 persons. The mill is run by one Jonval and one Fall River wheel, the fall being 9½ feet. The mill is located on the Blackstone, a few rods from the railroad; was built in 1850, and remodelled in 1866.

RIVERSIDE, 11 miles from Boston, and 33 from Worcester, a station on the Boston & Albany Railroad. A branch leaves the main road here for Newton Lower Falls. Distance 1 mile.

STIMSON, BABCOCK & LIVERMORE occupy 7 buildings, used in the manufacture of varnishes and japans, making a specialty of railroad, coach and carpet varnishes. The business was established in 1867, and employs 12 hands, turning out about 600 gallons per day. Mr. Stimson has an experience of 36 years, and Mr. Babcock 20 years, in the manufacture of varnishes. Their office and salesroom is located at 32 Broad street, Boston, Mass.

Valentine & Co., see Boston.

ROBERTS CROSSING, 11 miles from Boston and 39 from Fitchburg, a flag station on the Boston and Fitchburg Railroad.

ROCHDALE, 147 miles from Albany, 53 from Boston and 45 from Springfield; a small village, formerly called Clappville, changed to the present name in the spring of 1869. It contains one church. Situated on the Boston and Albany Railroad.

A. Hankey & Co., successors to Styles & Co., manufacturers of paper mill engine bars and plates, rag cutters and trimming knives, planing, shingle and veneer cutters, and every description of pattern knives, made to order. The business was commenced in 1848. The sizes of their buildings are as follows: hammer shop, 100x33 feet, one story; grinding shop, 80x20 feet, two stories; finishing shop and office, 60x25 feet, two stories. The number of employees is 18. They use 15 horse water power. The articles they manufacture are sent all over the country, even to Caliornia and the Canadas.

Rochdale Mills, Eben Dale, proprietor, established December, 1856. The buildings occupied are two, 4 stories high; lower, or main mill, 52x125 feet; the upper mill, 50 x25 feet; located about half a mile from the station. Manufactures flannels; employs 150 hands; runs 13 sets machinery and 78 broad looms. Average number of yards produced daily, about 4,000. Does a business amounting to $125,000 per annum. The power is furnished by a water wheel, under a 13 feet fall at upper mill, and 26 feet fall at lower mill. Located on the French river. Agents in Boston, New York and Philadelphia, Dale Bros. & Co.

Rockbottom, 32 miles from Boston, a country station on the Marlboro' Branch Railroad in the town of Stow. This town was incorporated in 1683, and is watered by the Assabet river, the soil is light and sandy.

B. W. Gleason & Co. The first factory building was built many years ago, and in fact is one of the oldest manufacturing places in the State; and is now standing and used as a wool sorting room and store house. The present works were established in 1834, additions made in 1851, by B. W. Gleason & Co., burnt in 1852, rebuilt in 1853, and is now as convenient and substantial a mill as any in the country. The building, situated on the Assabet river, is built of brick and is 4 stories high, dimensions 125x50 feet, with office, &c., attached 40x17 feet, also dye and boiler house 44x43 feet. Employ 90 hands, run 8 sets machinery and manufacture 2,500 yards woolen flannels daily. The power is furnished by a water wheel under a 14 feet fall. Also have a 55 horse power engine in readiness for dry seasons, which can be run in connection with the water wheel or without. There is a large farm connected with the factory property, of nearly 200 acres. Also 30 tenements, a store, blacksmith shop and other buildings. Selling agents, Messrs Dale Bros. & Co., Boston, New York and Philadelphia.

Rockport, located at the terminus of the Branch Railroad running from Beverly, 36 miles from Boston, is a hilly, rocky town of 3,700 inhabitants, the principal business of which is fishiug and quarrying stone. Contains 5 churches, viz.: 1 Catholic, 1 Congregational, 1 Baptist, 1 Methodist and 1 Universalist. Number of voters, 951; number of dwelling houses, 543; 1 national bank and 1 savings bank. There are 1 high, 3 grammar, 5 primary and 1 boys' winter school. Whole number attending school, 1,975.

J. J. & W. N. Manning occupy a 3 story wooden building 40x24 feet, with an L 30x20 feet, located on King street for the manufacture of isinglass, of which they turn out about 400 lbs. per day. Commenced business in 1867, and have 10 employees. Their machinery is driven by an engine of 50 horse power, built by Otis Tufts, of Boston, with 1 tubular boiler, 50 horse power, built by Joseph Haslam of Salem, Mass. This firm have an office at 42½ Main street, and do business to the amount of $50,000 per annum.

Rockport Steam Cotton Mills were established in 1847, with a capital of $270,000, for the purpose of manufacturing sheetings, drills, corset jeans, cotton flannels, cotton duck, &c. The business was established in 1847. Size of buildings as follows: main building, 350x65 feet, 2 stories, and attic, 116 feet from one end, the full width is a basement and occupied with machinery; there is an L, 40x100 feet, 2 stories; a boiler-house 40x48 feet, 1 story, is attached to main building; a building in which they manufacture their gas, is 43x28 feet, one story. All of the above buildings are made of granite taken from the Rockport quarries. They employ 225 hands, running 250 looms, 10,160 spindles, consuming 75,000 lbs. of cotton and producing 190-000 yards per month. Power is derived from a 240 horse power engine, Coliss' Patent, and also from 4 Corliss' drop flue and 4 plain cylinder boilers. J. H. Higgins, Agent.

Rock Station, a flag station situated 5 miles from Middleboro' and 40 from Hyannis, on the Cape Cod Railroad. The village contains about 125 inhabitants and 1 church.

Roslindale, (formerly South street) 5 miles from Boston, a country station on the Dedham Branch in the town of West Roxbury.

Rowley, 74½ miles from Providence, 31 from Boston and 25 from Portsmouth, a station and town on the Eastern Railroad. This town was first settled by a party of industrious and pious persons from Yorkshire, England, in 1639. They erected the first fulling mill in New England, and manufactured the first cloth in North America. There are a great variety of soils in the town; a large part is salt meadow and the residue is fertile and productive. It is watered by the Rowley river which rises from several ponds in Boxford. The river affords a water power, and before its junction with Plum Island Sound forms a harbor of moderate draught of water and in which many vessels are built. Ancient Rowley was divided in 1838. Its western part was detached and incorporated by the name of Georgetown. This town contains 1,200 inhabitants, 2 churches—1 Congregational and 1 Baptist. The Universalist Society hold services in the Town Hall. There are 4 schools 1 being grammar the others mixed. The number of voters is 297; value of real estate $414,377; personal property $85,400. There are 248 dwelling houses. Number of acres taxable 10,120½.

D. S. Henderson & Co. commenced business in 1868, for the manufacture of men's, boys' and youths' heavy boots and shoes; occupy a 2½ story wooden building 60 x 35 feet; employ 120 hands, turning out about 50,000 pairs per annum, doing business to the amount of $100,000. Their goods are sold mostly to Western dealers. Store house and salesroom No. 90 Milk street, Boston.

Wm. C. Foster, manufacturer of boots and shoes, commenced the business in 1852; employs 10 hands, and manufactures goods for the New England retail trade. He occupies a 2 story frame building 40x20 feet.

D. M. Prime & Sons occupy a 2 story building 25x22 ft. for the manufacture of boots and shoes for the retail trade. They have 18 employees. The business was established in 1818 by D. M. Prime.

Roxbury, 2 miles from the Boston & Providence Depot in Boston, a station in the city of Boston. See Boston.

About 55 hands are employed at the works of CAMPBELL, WHITTIER & Co., Roxbury—the full force being 125. This firm manufactures a large variety of heavy machinery of standard excellence, and have several specialties that are worthy of mention. These latter include the wire rope elevator, Miller's screw elevator, and Merrick's safety apparatus, for which they are agents.

This apparatus being worked by a counterbalance weight and not with springs, is always in working order, and there can be no failure in arresting the platform of the elevator at any desired point. Stamp mills of the most approved patterns, boilers, tanks, bleaching kiers, &c., &c., are also made at this establishment. The firm also make leather and rubber machinery, shaftings, &c. Small steam engines of 5 or 6 horse power, for print works, are among their products. One of these engines drives each printing machine, all of which can be operated at once without interference with each other.

ROYALSTON, 27 miles from Fitchburg and 28 from Greenfield, a village of about 300 inhabitants, in the town of Royalston, on the Vermont & Massachusetts Railroad. The surface of the town is somewhat rough and mountainous, but the soil is good, particularly on the banks of White river. The town was settled in 1771.

AT South Royalston is the ROYALSTON WOOLEN MILLS, George Whitney, proprietor, manufacture doeskins, cassimeres and tricots. Size of main mill, 140 x 36 feet. They employ 75 hands, use 4 sets of machinery and produce 120,000 yards per year. The motive power is furnished by a turbine water wheel and has a fall of 12 feet. The above firm also manufacture both wood and cane seat chairs, employing some 15 hands at this latter business.

SALEM. This is the oldest and largest seaport but one in Massachusetts. Its Indian name was Naumkeag, and is nearly surrounded by water being situated between two inlets of the sea. Its history is identified with that of Massachusetts. There is much in it to interest and instruct. Its rank, the character and number of its population, its facilities for commerce and the advantage of being the chosen residence of many of the first and most distinguished settlers, made it early and seriously thought of as the capital, instead of Boston. This seaport has been more known for its East India trade than any other in the United States. The first ship from here engaged in this trade was the Grand Turk, owned by E. H. Derby. She was at the Cape of Good Hope in 1784, and at Canton, in 1786; a model of her is in the Museum.

Salem was founded 1626, made a city in 1836, has a population of 21,250 inhabitants, located on the Eastern Railroad, 16 miles from Boston, at the intersection of the Lawrence Branch and Marblehead Branch Railroad, containing 18 churches, viz: First Church, Unitarian Congregation, organized 1629, is a brick building located on Essex, corner Washington street. East Church, Unitarian Congregational, organized in 1719, a freestone building, located on Washington Square. North Church, United Congregational, organized 1722, stone edifice, on Essex street. North Independent Church, United Congregational, organized 1824, brick, on Barton Square. Independent Christian Church, organized 1852. Place of Worship, Sewall street. First Univ. Society, founded 1805, brick edifice on Rust street. Tabernacle Orthodox Congregational, 1735, a new edifice, erected 1854, Washington, corner of Federal. South Church, Orthodox Congregational, founded 1735, Chestnut, corner of Cambridge street. Crombie Street Church, Orthodox Congregational, formed 1832. New Jerusalem Church, organized 1863. Place of worship, Hamilton Hall. First Baptist, organized 1804, brick building, 56 Federal street. Central Baptist, organized 1826, brick edifice, St. Peter street. Friends, organized 1658, brick building, Pine, corner Warren street. Lafayette street Methodist Episcopal, organized 1841, Lafayette, corner Harbor street. St. James' Church, Roman Catholic, organized 1859, 160 Federal street. Church of the Immaculate Conception, R. C., organized 1810, Walnut street. Grace Church, Episcopal, organized 1858. Gothic Church, on Essex street. St. Peter's Church, Episcopal, gathered in 1733, St. Peter, corner of Brown street. The Post Office is located in Asiatic Building, 32 Washington street. The Custom House for the district of Salem and Beverly, is located at No. 11 Derby street.

There are seven banks, viz.: Salem Asiatic National Bank, Asiatic building, No. 32 Washington st.; capital $315,000. First National Bank, No. 7 Central st.; capital $300,000. Mercantile National Bank, No. 7 Central street; capital $200,000. Merchants National Bank, Asiatic building, 32 Washington street; capital $200,000. National Exchange Bank, No. 231 Essex street; capital $200,000. Naumkeag National Bank, No. 161 Essex street; capital $500,000. Salem National Bank, No. 29 Washington street; capital $200,000.

Savings Banks: Salem Savings Bank, Asiatic building, 32 Washington street, incorporated 1818; amount deposited, $3,700,000. Salem Five-Cents Savings Bank, Downing's block, 175 Essex street, incorporated 1855; amount deposited, about $600,000.

Insurance Companies: Salem Marine, capital $100,000; office 32 Washington street. Essex Mutual Fire Insurance Co., 42 Washington street. Holyoke Mutual Fire Insurance Co., 27 Washington street, Holyoke building; cash assets over $150,000; amount insured, $15,000,000. Salem Mutual Fire Insurance Co., 42 Washington street.

Plummer Hall: This building is located at 134 Essex st. It was erected in 1866, from funds left by the estate of Miss Caroline Plummer to the proprietors of the Salem Athenæum. The first story is appropriated to a portion of the Essex Institute, and has two ante-rooms, one of which contains the periodicals and publications received in exchange; the other, the manuscripts and historical collections. In the large hall, in the rear, has been arranged the newspapers, pamphlets, and books of reference of the Institute. The second story has a similar arrangement of rooms; the western ante-room is appropriated to the use of the librarian, and some of the principal works of reference, and the new books belonging to the Salem Athenæum. The eastern, to the libraries of the Essex South District Medical Society and the Essex Agricultural Society. The alcoves on the western side of the large room in the rear, contain the library of the Salem Athenæum. Those on the eastern, that of the Essex Institute. The libraries of the several societies in the building, contain about 40,000 bound volumes, besides a large collection of pamphlets.

Salem Athenæum, incorporated in 1810, was formed by the union of the Social and Philosophical Libraries. The former was organized in 1760, the latter in 1781. No. of volumes 13,500, which are deposited in Plummer Hall, 134 Essex street. Library open each day between 9 a. m. and 1 p. m. and from 2 to 5 p. m., in the summer months to 6 p. m.

Essex Southern District Medical Society, consists of all the members of the Massachusetts Medical Society who reside in Lynn, Swamscot, Nahant, Saugus, Marblehead, Salem, Danvers, Middleton, Beverly, Wenham, Topsfield, Ipswich, Hamilton, Essex, Rockport, Gloucester, Manchester

STERRY SMITH'S
FURNACE GRATE BAR!

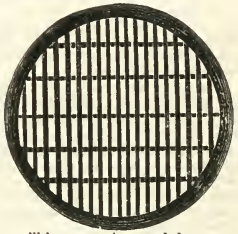
FOR STEAMSHIPS, STEAMBOATS,

Locomotives, Stationary Furnaces, &c.,

PATENTED, OCTOBER 2d, 1866.

The advantages which these bars possess over others is in their combination and the distribution of the metal in such a manner that there is no possibility of their warping or twisting about, as is generally the case with other bars; they are also much stronger and more durable, and, in consequence of their combined strength, can be made considerable lighter.

Circular Grates



Of all Sizes for Upright Boilers.

Also Manufacture all kinds of

Machinery Castings, Gas

Lamp Posts and Pipes.

All orders addressed to **STERRY SMITH, SALEM, MASS.,** will be promptly attended to.

C. H. NEWCOMB, General Agent.

and Peabody. The society was formed in 1805. The library is annually increased and contains about 1,000 volumes. It is deposited in Plummer Hall, where the regular meetings of the society are held.

Many other societies and institutions are located here.

MANUFACTURERS.

STERRY SMITH occupies a foundry, the main building of which is 80x45 feet, with a wing 25x25 feet; also, a wareroom attached 30x20 feet, two stories, located on the corner of East Gardner and East Prospect streets, where he employs from six to ten persons in the manufacture of Sterry Smith's patent furnace grate bar, for steamships, locomotives, stationary furnaces, &c. Also, manufacture gas light posts, and every description of iron castings. The business was established in 1845. An engine of six horse power, built by the proprietor, supplied with steam from a tubular boiler, eight horse power, built by Joseph Haslam, of this city, furnish the motive power.

T. J. GIFFORD & Co., occupy a 3 story wooden building, 60x56 feet as a planing and moulding mill and bracket manufactory, also occupy a 4 story wooden building, 50x40 feet, for the manufacture of doors, sashes and blinds, located at the foot of Carpenter street, on a line with the Lowell Railroad. Commenced business in 1855, and have 40 employees. Their machinery, consisting of planing, moulding, mortising and tenoning machines and other machinery adapted to the business, is driven by an engine of 40 horse power, with a tubular boiler, built by Joseph Haslam, of this city; do business amounting to about $150,000 per annum.

SIMEON FLINT manufacturer of Knight & Woodward's patent Hydraulic Cement Sewer Pipe, occupies a wooden building 70x60 feet, located on Dodge's wharf, where he employs 4 hands, and turns out about 75 feet per month, varying in size from 3 to 24 inches. Commenced business in 1864. This pipe is specially adapted for distribution and drainage in cities, towns and villages. It will stand the most severe test, and improve in strength with age and use. These pipes are in use in New York, Boston, Brooklyn, Central Park, Hartford, &c., &c., and under heavy railroad embankments; and stand the most severe test of acids. Office 221 Derby street, Salem.

ALBERT WILKINS occupies a tannery 100x50 feet, containing 100 vats, located in the rear of No. 46 Boston street, for the manufacture of leather. Commenced business in 1845; has 7 employees, and tans 300 hides per week, doing business to the amount of $60,000 per annum. Runs an engine of 12 horse power, built by S. E. Clubbuck, of Boston, with 1 tubular boiler 20 horse power, built by James Tetlow, of Boston.

JOSEPH HASLAM occupies a wooden building 50 x 30 feet, located on Ward street, opposite Union, for the manufacture of steam boilers of every description, and tanks, employing about 12 hands. Commenced business in 1865, and does business to the amount of $20,000 per annum.

W. D. & S. VARNEY, tanners and curriers, occupy a tannery containing 200 vats, located in the rear of 44 Boston street, also occupy a currying shop 60x30 feet, built of wood and 3 stories high, in the rear of which is a tan yard containing 70 vats and located at 72 Boston street, for the manufacture of leather. The business was established by the late Solomon Varney, about 1818, and has been carried on by the present firm since 1841. Have 20 employees; run at their tannery an engine of 12 horse power with one tubular boiler 25 horse power, built by Joseph Haslam of this

SALEM BOILER WORKS.

JOSEPH HASLAM,

MANUFACTURER OF

STEAMBOAT, LOCOMOTIVE, HORIZONTAL TUBULAR AND UPRIGHT TUBULAR, FLUE AND CYLINDER

BOILERS.

Ward, opposite Union Street, Salem, Mass.

city. At their currying shop they run an engine of 6 horse power, built by J. C. Hoadley of Lawrence, Mass. This firm have an office and salesroom at the corner of High and Congress streets, Boston.

GILMAN ANDREWS occupies two 2½ story wooden buildings 50x26 feet, each with a blacksmith shop attached, located at No. 27 Beach street, for the manufacture of express wagons, of which he turns out about 150 per annum, employing 15 hands, and doing business to the amount of $25,000. His machinery is driven by an engine of 12 horse power built by J. C. Hobbs of Cambridge, Mass., with 1 tubular boiler 50 horse power, built by Joseph Haslam of this city, which, in addition to furnishing steam for the engine, heats all the buildings.

THE SALEM BOOT & SHOE CO. occupy a 2 story wooden building, with basement, 105x30 feet, with an L 90x27 feet, located at No. 42 Mill street, for the manufacture of gents', ladies' and misses' fine boots and shoes. Commenced business in January, 1866; have 100 employees and turn out annually 60,000 pairs, which are sent to all parts of the Union, doing business to the amount of $100,000. Run 2 McKay and 25 other machines of different kinds. Jonathan A. Kenney is Treasurer, and Robert Chase, Superintendent of this company, who have an office and salesroom at No. 48 Hanover street, Boston, Mass.

DRISCOL & LOONEY occupy a 2½ story wooden building 40x22 feet, located at No. 69 Mason street, for the currying of leather. Commenced business in 1867, and have six em employees. Run an engine of five horse power, built by John W. Weston, of this city, with one tubular boiler eight horse power.

ROBERT MUHLIG occupies a four story wooden building 80x30 feet, with out buildings, covering 20,000 square feet of room, for the manufacture of leather. Commenced business in 1845, and employs 20 hands. His machinery is driven by an engine of 25 horse power, built by Bird & Co., of East Boston, Mass., with one tubular boiler, 50 horse power, built by Joseph Haslam, of this city.

SNOW & REDMOND, tanners and curriers, occupy a two story wooden building 150x50 feet, located at No. 12 Franklin street, for the manufacture of wax leather. The business was established by Mr. Snow in 1840. This firm have 20 employees, and turn out 10,000 hides per year, and do a business to the amount of $50,000. Their machinery is driven by an engine of eight horse power, with one flue boiler, 25 horse power.

GILMAN A. ANDREWS occupies a tan yard covering about 15,000 square feet of room, also occupies a 2½ story wooden building 43x30 feet, located at No. 27 Beach street, for the manufacture of wax leather. Commenced business in 1864, has 16 employees, tans about 10,000 hides per annum, does business to the amount of $50,000. His machinery is driven by an engine of 12 horse power, built by J. C. Hobbs, of Cambridge, Mass., with one tubular boiler, 50 horse power, built by Joseph Haslam, of this city.

JAMES H. COUREY, currier, occupies a 2½ story wooden building, 40x28 feet, located at the foot of Buffum street, for the manufacture of leather; commenced business in 1848, and employs 4 hands.

J. GARDNER, occupies a 1½ story brick building, 150x100 feet, located at No. 6 Charles street, for the manufacture of rum. Has in use a copper boiler capable of holding 1200 gallons. Commenced business in 1863.

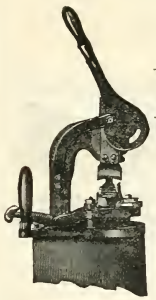
J. SOUTHER & Co. commenced business in 1843, for the manufacture of morocco, kid, goat and pebbled calf skins, &c., occupying an acre of flooring, in a 3 story frame building 80x26 feet, as a tannery and dye shop. Salesroom and drying room 60x30, 4 stories, frame; finishing shop 80 x 25, 4 stories, of wood. Have 48 employees, turn out about 1,500 goat skins, 700 calf skins, 120 dozen sheep skins per week. Motive power furnished from an engine of 10 horse power; steam from a tubular boiler built by McKay & Aldus, of E. Bostou. This firm do a business of about $150,000 per annum. Office and salesroom, No. 63 Kilby street, Boston.

C. L. GAY & Co. occupy the second story of a 4 story frame building 70x58 feet, for the manufacture of pasted inner soles, stiffenings, &c. Commenced business in 1865; have 25 employees, and do a business of $25,000 per annum.

JAMES RILEY, manufacturer of wax, kip, split, and grain leather. Commenced the business in 1862. His works are situated on Goodhue street, and consist of tannery, 1 story, 125x80; two story curry shop, 60 x 30; beam house 35x35, 2 stories. Have 15 employees, turning out 1,000 sides per week. An engine of 15 horse power furnishes the power for driving the machinery; steam from a tubular boiler, built by Kendall & Roberts, of Cambridgeport, Mass.

SAMUEL PITMAN, JR. occupies a 4 story frame building 65x25 feet, located at No. 2 Goodhue street, for the manufacture of wax and kip leather. The business was established by Samuel Pitman in 1820. Have 12 hands, curry 600 sides and splits per week. Power furnished from a hot air engine built by Popus, of 2 horse power. Does a business of $75,000 per annum.

EAGAN & MCGRATH occupy a tan house 56x45 feet, curry shop 54x30, with out-buildings, &c., covering about half an acre of ground, located in the rear of Mason street, for the manufacture of leather. The business was commenced in 1868. Employ 27 hands, producing 400 hides



ZINA GOODELL,

Blacksmith and Machinist,

—— Manufacturer of ——

Stuart & Corson's Patent Heel Turning Machines,

NO. 16 LAFAYETTE STREET,

(Near the South Bridge.) Salem, Mass.

per week. Run an engine of 8 horse power with flue boiler of 20 horse power.

MADIGAN & BRENNAN occupy a tan yard 100x30 feet, also a beam house 56x30 feet located on Goodhue street, for the manufacture of leather. Commenced business in 1862. Have 7 employees and turn out 300 hides per week. Motive power is furnished from an engine of 5 horse power, with 1 tubular boiler.

JOSEPH NEWELL occupies two floors in a two story brick building 80x40 feet, located at No. 7 Front street, for the manufacture of doors, sash and blinds; employs four hands. The machinery is driven by an engine in building adjacent. Mr. Newell commenced business in 1835.

WM. CUTLER occupies a two story wooden building 32x23 feet, situated at No. 138 Boston street, for the manufacture of valises, bags, pocket books and wallets. Commenced business in 1853. In the busy season he makes from 30 to 40 dozen pocket books per week.

M. ROBSON & CO., manufacturers of pebble, grain, buff, wax and split leather. Business commenced in 1865. Occupy a three story frame building 100x50, located on Goodhue street; employ 22 hands, produce weekly about 300 sides. The motive power is furnished from an engine of 4 horse power, built by John W. Western, of this city. Steam furnished from a tubular boiler, by Jos. Haslam, also of this city.

ZINA GOODELL occupies the lower floor of a 2½ story wooden building, 60x30 feet, located at No. 16 Lafayette street, for the manufacture of Stuart & Corson's pateut heel turning machines, and other boot and shoe machinery. Commenced business in 1857, and has 9 employees. His machinery is driven by an engine of 5 horse power, built by himself, with one tubular boiler, 5 horse power, built by Joseph Haslam, of this city.

JAMES GRIFFIN & CO. commenced the tanning and currying of leather in 1854. Their works are situated in the rear of Beam street, covering about half an acre of ground, and consisting of tannery, curry shop, beam house, store houses, &c. Employ 16 hands. Power furnished from an 8 horse engine, furnished with steam from a flue boiler, builder "unknown."

ANDERSON & REYNOLDS commenced business in 1865, for the manufacture of children's shoes, occupying a 3 story frame building 30x42 feet, located at 405 Essex street. Have 20 employees, turning out 500 cases per annum. Office and sales room 75 Pearl street, Boston.

SALEM & SOUTH DANVERS OIL CO., manufacturers of Rosin and Petroleum oils. Incorporated in 1855. Capital $12,000. A. A. Evans, president, and N. G. Simonds, treasurer and agent of the company. Their works cover about 30,000 square feet of land, located on Mason street, on which are 13 buildings, the largest 100x30 feet, the smallest 25 feet square. Employ 8 hands, and do a business of about $75,000 per annum. Machinery driven by an engine of 4 horse power, built by John W. Western, of this city. Steam from a tubular boiler, built by Allen & Endicott, of Cambridgeport.

SALEM LABORATORY CO., incorporated in 1819. Capital $150,000. William H. Foster, president and treasurer, and Nathaniel Abery, superintendent. Office in Boston, 11 Central street. This company manufacture acids and Blue Vitrol. Their works, consisting of 16 buildings, cover nearly 300,000 square feet of ground, situated on Walter street; have 45 employees. Their power is furnished from 2 engines of 45 horse power combined, one built by Bird & Co., of East Boston, the other by Allen & Endicott, of Cambridgeport. Steam furnished from a flue and tubular boiler of 75 horse power combined, for heating the buildings and for furnishing steam for the engine.

NAUMKEAG STEAM COTTON CO., incorporated in 1839. Capital $1,500,000; manufacture cotton goods. This company run 85,000 spindles, 1,700 looms; employing 1,800 hands; consume upwards of 8,000 bales of cotton per year. Their machinery is driven by 2 Corliss Steam Engine Co.'s engines, one of 900 horse power. Consumes about 100 tons of coal per week.

GEORGE L. NEWCOMB, manufacturer of steam engines, shafting and general machinery, occupies a 2 story wooden building 65 x 35 feet, with out buildings, &c., covering an area of 5,000 square feet, located at No. 18 Peabody street. Commenced business in 1838, has 12 employees, and during the last year has built, "and have in operation of building," 6 steam engines of from 15 to 60 horse power, and weighing frow 1½ to 8 tons each. The machinery, consisting of lathes, planers, drills, &c., is driven by an engine of 5 horse power of his own manufacture, with a flue boiler 8 horse power, built by James Tetlow, at East Boston, Mass. Does business amounting to $50,000 per annum. (See page 351.)

H. B. PHILLIPS commenced business in 1867, manufacturer of wood moulding machines, shafting and general machinery, occupying the lower floor of a 3 story building 80x30 feet, situated at Nos. 194 and 196 Derby street, employs 8 hands. His machinery consisting of planers, lathes, drills, &c., is driven by an upright engine of 8 horse power with locomotive boiler of 10 horse power.

WM. KENNEY, manufacturer of upper leather, commenced the business in 1835, occupying a building 90x80 feet, beam

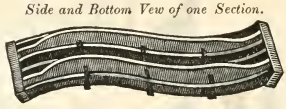
J. R. SMITH'S

Top view of one Section.

PATENT

FURNACE

Side and Bottom View of one Section.



GRATE BARS,

For Steamboats, Steamships, Locomotives, Stationary Furnaces, &c.

Patented Nov. 5, 1867.

J. R. SMITH, Proprietor and Manufacturer,

SALEM, Mass.

These Bars are acknowledged by all practical engineers to be superior in every respect to all other Bars in use.

We claim a superiority over all other Bars on the following points, DURABILITY. By making the ribs with a double curve the Bar is not so liable to be strained and injured by unequal heating as it would if the Bars were straight, or even of a single curve. If one side of the bar becomes heated first it yields on the opposite side, thus preventing any injury to the Bar, such as warping, twisting, cracking, &c., which would otherwise result from the sudden expansion of one side without suitable provisions for a corresponding bending on the other side. They will last one-third longer than any other bar in use.

2d.—Strength. Their peculiar construction and the distribution of the metal renders them the *strongest* and at the same time the *lightest* Bars ever made. They cannot sink vertically, being double curved, which enables them to support great weight and endure very high heat.

3d.—Economy of fuel. By double curving the Bar, a livelier draft of air is afforded, producing more perfect combustion and more steam than any other Bar with the same quantity and quality of fuel.

The strain of expansion being overcome by the spring of the Bar a uniformity of *air spaces* is preserved, insuring a free draft at *all times*, thereby greatly saving fuel.

The tops of the Bars are grooved and the back end beveled (to prevent the ashes from becoming wedged in between the boiler and Grate, thus preventing their proper expansion,) which points are in themselves simple, yet add much to the durability of the Bar.

They are admirably adapted to the burning of all kinds of fuel, from the finest dust to the coarsest coal.

These Bars have been exteusively used for the last year and in every case have given entire satisfaction, as will be seen by a few of the many testimonials which we have received.

We are prepared to furnish them at short notice and very reasonable terms, suitable for all kinds of fuel and warrant them to give satisfaction.

Parties sending orders for our Patent Grate Bars will please give the exact width and length of furnace, also, kind of fuel used.

Orders respectfully solicited and immediate and prompt attention given.

LOCAL AGENTS:

ROCH BROS., Springfield, Mass. G. G. HICKS, Providence, R. I.

house and lime shed 90x24 feet, and another beam house 30x20 feet, located in the rear of Essex street, employing 6 hands and produces 250 hides per week. The motive power is furnished from an engine of 8 horse power, built by J. W. Western of this city, with 1 tubular boiler of 18 horse power built by Joseph Haslam, also of this city.

J. M. ANDERSON, glue manufacturer, commenced in Marblehead in 1837, but removed in 1856 to Salem, occupying 9 acres of ground, covered with buildings necessary for the business, located on the Salem Turnpike, employs 9 hands, turning out about 80 tons per year. The motive power is furnished from an engine of 3 horse power, built by the Boston Piping Co., have 2 cylinder boilers 8 horse power, built by McKay & Aldus of East Boston.

CHARLES WESTERN & SONS commenced business in 1828 by Charles Western, as manufacturer of leather. They occupy a 2½ story wooden building 100x40 feet, L 50x30 feet, located in the rear of 11 Boston street. Have 25 employees and turn out 300 skins per week. Connected with this establishment is a machine shop for the manufacture of stationary steam engines, and general machinery, this branch of the business has been in operation about 20 years. The machinery is driven by 2 engines of 20 horse power combined, one built by themselves the other by George L. Newcomb. Have a tubular boiler, built by Joseph Haslam of this city.

J. R. SMITH occupies a foundry 80x60 feet, built of wood, and located at the junction of Peabody and Union streets, for the manufacture of every description of iron castings, making a specialty of the manufacture of the double curved furnace grate bar, patented by him November 5th, 1867. Commenced business in 1845. Has 10 employees, and turns out annually about 300 tons of castings, doing business to the amount of $20,000. Runs an engine of 5 horse power, built by George L. Newcomb, of this city; one flue boiler 10 horse power, built by O. C. Smith, formerly, of this city.

SALEM FOUNDRY AND MACHINE SHOP, located at the corner of Derby and Liberty streets, occupy a two story brick building 95x75 feet, with an ell 45x25 feet, and manufacture stationary steam engines, pulleys, hangers, and every description of castings. The business was established in October,

GEORGE L. NEWCOMB,

Mechanical Engineer & Machinist,

MANUFACTURER OF

Stationary Engines and General Machinery,

NO. 18 PEABODY ST., SOUTH SALEM, MASS.

Particular attention given to repairing all kinds of Machinery.

1866, and gives employment to 50 persons, and consumes about 30,000 lbs. of iron per week. Their machinery, consisting of engine lathes, planers, drills, bolt and gear cutting machines, and other necessary machinery, is driven by an upright engine of 15 horse power, built by the Fuller Iron Works, of Providence, R. I., supplied with steam from an upright tubular boiler of 20 horse power, built by William C. Hicks, of New York. Do a business of $50,000 per annum.

Salem Machine Co., manufacturers of the Hicks Steam Engine, occupy a wooden building 130x40 feet, used as a machine shop; a 2½ story brick building 50x35 feet, used as a pattern shop, office and store room; also, a blacksmith's attached for doing all kinds of machine forging, located on Bridge street. This company commenced business in March, 1866. Have from 30 to 40 employees, and have a capacity for turning out 2 machines per week varying from 6 to 60 horse power, and weighing from 975 to 8,600 lbs. each. Their machinery, consisting of 13 engine and 4 hand lathes, 5 planers, 2 upright drills, 1 milling machine, 2 grinding lathes, 1 large boring machine for boring engine cylinders, and other necessary machinery, is driven by an engine of 15 horse power, Hicks' patent, of their own manufacture, furnished with steam from a tubular boiler, 22 horse power, built by Allen & Endicott, of Cambridgeport, Mass. Edward E. Pratt is treasurer, Jacob A. Allen, agent, and Justin Hinds, superintendent of this company. Office 13 Doane street, Boston, Mass.

C. Harrington & Co., leather manufacturers, occupy a 4 story wooden building 75x34 feet, a 2½ story wooden building 56x36 feet, used for a currying shop; a fire proof engine and boiler house built of brick 30x24 feet, and a tan yard containing 55 tan pits, located at 23 Boston street, Salem, Mass; also, a tan-yard covering an area of upwards of 65,000 square feet, containing 88 tan, 15 lime, 7 soaking pits; a bark mill, beam houses, lime houses, tan sheds, &c., located on Walnut street, Peabody, Mass.

Messrs. Harrington & Co. are amongst the most extensive and enterprising of the many leather manufacturers located in this part of the country, giving employment to about 60 hands, and are turning out 1,500 sides of leather per week. Their machinery, which is of the most improved kind, is driven by an engine of 20 horse power, built by George L. Newcomb, of this city, with 2 flue boilers of 20 horse power each, built by James Tetlow, of East Boston, Mass. They have also in operation, at the tan yard, an engine of 25 horse power and 2 flue boilers of 20 horse power each. This firm was established in 1865, and do a business amounting to about $300,000 per annum.

The Salem Lead Co. was incorporated in 1868, with a capital of $150,000. B. H. Silsbee is president and F. Brown treasurer. Office No. 26 Post Office building, They also have an agency in Boston. The buildings are new and comodious, and are well adapted to the purpose for which they are used. The following is a meagre description of the buildings which they occupy: 1st, a 4 story wooden building 50x125 feet, where they manufacture white lead and lead pipe; 2d, a 1 story wooden building 52x225 feet, used as a corroding house, and a 1 story brick building 42x70 feet, used as an engine and boiler house and smelting and casting rooms. These buildings were built under the supervision of D. G. Batchelder, the superintendent of the works, and are located on Saunders street on a line with the Eastern Railroad. They employ 50 hands, and manufacture 1,000 tons of lead pipe and 1,500 tons of white lead per year. The machinery, which is of the newest and most improved kind, is driven by an engine of 100 horse power, with 2 tubular boilers of 50 horse power each, built by the Corliss Steam Engine Co., of Providence, R. I.

The India Manufacturing Co. was incorporated 1868, with a capital of $100,000. They occupy a 3 story wooden mill 45x150 feet, with two wings 15x15 feet, one on each side, located between Webb and English streets, where they employ 130 hands in the manufacture of gunny cloth, of which they turn off about 4,000 yards per day. Their machinery is driven by an engine of 60 horse power, built by the Putnam Machine Co. of Fitchburg, Mass., with two tubular boilers of 50 horse power each, built by the Swamscot Machine Co. of South Newmarket, N. H.

John W. Grant, manufacturer of paper boxes, occupies a room 20x20 feet, located No. 6 Central street, commenced business Sept. 1867. Employs 3 hands and consumes 10 tons of straw board per year.

John Huse occupies a 3 story wooden building 27x75 feet, located at Nos. 57 and 59 Boston street, for the manufacture of wax and kip leather. Employs 10 hands, turns out 15,000 sides per year and does business amounting to $75,000.

James Fanning occupies two wooden building, one of which, is two stories, 38x80 feet, and the other 1½ stories, 25 x75 feet, located at No. 2 Prospect street, for the manufacture of upper leather. He commenced business in 1857; employs six hands, turns out about 20,000 sides of leather per year, and does business amounting to $75,000.

James A. Sanborn occupies a three story wooden building 30x100 feet, located rear of No. 11 Mason street, for the manufacture of wax, kip and split leather. Employs 12 hands, and turns out about 15,000 sides per year. Commence-

ed business in 1864. His machinery is run by an engine of 10 horse power, built by George L. Newcomb, of this city, with a tubular boiler of 40 horse power, built by James Haslam, of this city.

G. F. Derby occupies a two story wooden building 25x60 feet, located at the foot of Franklin street, for the manufacture of leather. He commenced business in 1866; employs eight hands, turns out 100 sides per week, and does a business of $15,000 per year.

A. A. Evans &. Sons, manufacturers of wax, kip and split leather; commenced business in the year 1836. They occupy a 3½ story wooden building with a brick basement, 26x 60 ft. located in the rear of Mason street, where they employ 20 hands, and turn out from 25,000 to 30,000 sides per year, and do a business of $100,000 per annum. They run an engine of four horse power, built by John W. Weston, of this city, with a flue boiler of 10 horse power, built by James Tetlow, of East Boston, Mass.

Daniel C. Haskell occupies a tan yard, with buildings used as currying shops, covering an area of about 33,000 square feet, located at No. 71 Mason street, where he employs.35 hands in the manufacture of upper leather, of which he turns out about 40,000 sides per year, worth $125,000. Their machinery is driven by an engine of 14 horse power, built by George L. Newcomb, of this city, with a tubular boiler of 50 horse power, built by James Haslam, of this city.

James A. Dalton, manufacturer of upper leather, occupies a tan yard and buildings covering an area of 37,500 square feet, located at No. 61 Mason street. He commenced business in 1846; employs 16 hands, turns out about 18,000 sides per year, and does a business of $75,000. Power supplied by an engine of six horse power, built by John W. Weston, of this city, with a cylinder boiler of 12 horse power, built by James Tetlow, of East Boston, Mass.

James Lord & Son occupy a tan yard, covering an area of 1½ acres, containing 175 pits with a number of buildings located in the rear of 180 Federal street, for the manufacture of leather. They employ 10 hands, turn out about 20,000 sides per year, and do a business to the amount of about $100,000. Commenced business in 1862.

Parley Verry, manufacturer of ladies', misses' and children's fine boots and shoes, commenced business in 1866. He occupies a shop No. 5 Washington street, where he employs 25 hands. The amount of business done is $25,000.

Wm. McKean, manufacturer of ladies', misses' and children's pegged and machine nailed boots and shoes, occupies a 3 story wooden building 28x78 feet with an L 28x32 feet, located No. 6 Norman street. He employs about 110 hands, turns out about 550 pairs per day and does business to the amount of about $30,000 per year. Commenced business in 1857.

T. G. McCurdy occupies a shop 50x60 feet in a 3 story wooden building, located No. 4 Norman street, for the manufacture of ladies', misses' and children's boots and shoes; employs 15 hands and turns out about 350 pairs per week; commenced business in 1854.

Benjamin & George Pitman occupy a 2½ story wooden building 30x90 feet, located No. 24 Boston street, for the manufacture of wax, kip and split leather; employ 15 hands and turn out about 5,000 sides of leather and 30 tons of splits per year; commenced business in 1864.

Wm. P. Martin occupies a 2½ story wooden building 25x 75 feet and a 1½ story wooden building, 36x100 feet, located No. 1 Beach street, for the manufacture of upper leather and curriers' machinery. He commenced business in 1848. Employs 24 hands, turns out 30,000 sides per year, and does a business of $100,000.

Joseph E. Arnold, morocco manufacturer, occupies a 3 story wooden building 18x55 feet and a 1 story stone building 20x40 feet, located in the rear of Boston street. Employs 10 hands. Commenced business Nov. 1868.

W. F. Nichols occupies the following wooden buildings: one of 3 stories, 80x125 feet, one 2 stories, 30x60 feet, and one 1 story, 25x40 feet, located on Nichols street, for the manufacture of upper leather. Employs 20 hands, turns out 15,000 sides of leather per year, worth $70,000. The machinery used in making this leather is driven by an engine of 35 horse power, built by the Putnam Machine Co. of Fitchburg, Mass. Office and sales rooms No. 177 Congress street, Boston, Mass. This business was established 75 years ago.

John Culliton, manufactures wax, kip and split leathers, occupies a building 75x40 feet, situated in the rear of Mason street, built and business commenced in 1848. Employs 20 to 25 hands, and produces about 100 sides per day. Consumes about 500 cords bark yearly, besides oil, tallow and other materials for finishing. His motive power is furnished from a 6 horse engine, made by C. H. Weston, of this place. The productions of these works are sold by Culliton, Tread well & Co., 68 High street, Boston.

Jos. Frye occupies a mill 75x32 feet, built of brick, in 1835, called Frye's Mills. A 30 horse engine supplies the power for one hide milling, two bark grinding, one leather rolling mill. Improvements and additions have been made from time to time, entirely rebuilding, in the spring of 1869, so that now it is 119 feet long; and a new engine of 100 horse power has been substituted. A tannery and two carriage shops are connected.

Seccomb Oil Manufacturing Co., manufacturers of lubricating and machinery oil. Capital $50,000; incorporated 1865. They occupy three brick and three wooden buildings, employing 12 hands, producing about 7,000 gallons per week. This company's goods are sold in Boston, by Seccomb, Kehew & Thayer, 39 and 40 India street.

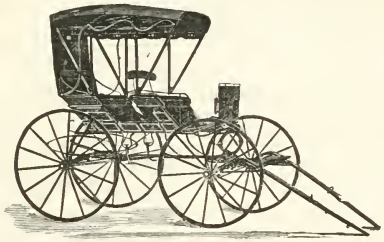
Forest River Lead Co. Business first established by Francis Peabody, Esq., about the year 1825. Works located at Forest River, on the road leading from Salem to Marblehead. Company formed in 1843, and incorporated in 1846. Capital $100,000. Jno. A. Bird, President, Geo. C. Chase, general agent, H. M. Brooks, Treasurer. Manufacture white lead, sheet lead and vinegar. Number of employees about 50. Stock consumed and goods manufactured about 2,000 tons. Engine 100 horse power, Brown's patent and make; boilers same capacity, made by Allen & Eudicott, tubular. Selling agents, Boston, J. A. & W. Bond & Co., 211 State street; Providence, Boon, Rice & Co., 25 Exchange Place; Lawrence, Henry Barton & Co.; Lowell, C. B. Coburn & Co. This company has for years had an established reputation of making white lead that cannot be surpassed, either at home or abroad. The general agent, G. C. Chase, has had about forty years experience in the lead business, and gives to the manufacture of it his constant personal attention and direction. So well understood is this in some localities, that consumers are found who will not have lead of any other manufacture. The most essential quality in white lead, viz., its coveriug capacity, this lead posseses in an eminent degree.

SANDWICH, 62½ miles from Boston, on the Cape Cod Railroad. This village of about 1,500 inhabitants, contains 5 churches and 1 Savings Bank. It is noted for its glass works, having one of the largest glass works that there is in this country.

Sandwich Tack Co. commenced business in 1850, for the

EDWIN MORRILL,

Manufacturer of



Carriages

—AND—

Sleighs

—OF—

EVERY DESCRIPTION.

—o—

Carriages Constantly on Hand at my Depository

—AT—

SALISBURY POINT,

MASS.

(See page 233.)

manufacture of all kinds of tacks, brads, shoe and cigar box nails, &c. They occupy buildings of the following sizes: Factory 40x30 feet, 3½ stories high; store house 40 x30 feet, 2 stories high; packing house and blacksmith shop all combined 100x20 feet, 1½ stories high; scaling house 20 x15 feet, one story high. They employ 30 hands and cut 100 tons American iron and 100 tons of Swedes and Norway iron annually. Amount of business done yearly from $50,000 to $75,000. Power is supplied by a 20 horse Leffel double turbine water wheel.

SANDY POND, 3 miles from Groton, Junction, and 14 from Lowell, a flag station on the Stoney Brook Railroad, and on the borders of Sandy Pond, of which Stoney Brook is the outlet.

SAUGUS, (See Saugus Centre.)

SAUGUS CENTRE, 3 miles from Lynn and 10 from Boston, a village in the town of Saugus, on the Saugus Branch of the Eastern Railroad. The town of Saugus consists of Cliftondale, East Saugus, and Saugus Centre, and contains 3,000 inhabitants. Saugus Centre contains 2 churches,—1 Orthodox and 1 Universalist.

CHARLES S. HUTCHINS occupies the lower floor of a 2 story wooden building 40x25 feet, located on Central street, for the manufacture of ladies', misses' and children's boots and slippers. Commenced business in 1867, employs from 25 to 30 hands. He turns out 60 cases of boots and slippers per month.

PRINKER & Co. occupy a 4 story brick building 136 x 56 feet, with an L 2 stories, 36 x 80 feet; also a brick building 3 stories 150 x 80 feet, with an L 40x36 feet; store house, built of wood, 3 stories, 30x75 feet; tan house, 2 stories, 40 x30 feet, built of wood; wool house, 3 stories, 60x40, with 30 dwelling houses, where their help reside, located on Central street, for the manufacture of flannels. The business was established in 1835. They employ 105 hands. Their machinery, consists of 10 sets of cards, 34 pair of looms, 19 jacks, 3 dressers, 5 spoolers, 2 drying machines, 2 pickers, 1 flannel drying machine, 4 fulling mills, 2 drying boxes, and 2 scouring boxes.

F. SCOTT & SON, occupy a four story brick building, 80x50 feet, with brick dye house, one story 22x30 feet, wood store house, 1½ stories, 130x40 feet, with a 1 story wooden store house, 50x30 feet, located on Central street, for the manufacture of flannels. The business was established 1848, employing 50 hands. Their machinery, consisting of 4 sets of cards, 30 looms, 9 jacks, 1 fulling mill, 1 cleaner, 1 steam press and 1 dryer, is driven by a steam engine of 20 horse power, with 1 flue boiler 40 horse power, built by the Atlantic works of East Boston; also have one breast water wheel 10 feet wide, 14 feet in diameter. This firm consume 400 lbs. of clean wool and turn out 9750 yards of flannel per day.

WALTON & WILSON, occupy a two story wooden building, 18x30 feet, located on Main street, for the manufacture of ladies,' misses' and children's slippers. The business was commenced in 1856; employ 75 hands, consume 1500 feet of upper leather and turn out 1500 pairs of slippers per week.

GEORGE W. BRUCE, occupies one floor of a two story building 30x20 feet, located on Central street, for the manufacture of ladies, misses' and childrens' boots, shoes and slippers; commenced business in 1867; employs 15 hands. He turns out 300 pairs of slippers, and consumes 275 feet of goat and kid skins per week, and does a business of $25,000 per year.

SWEETSER BROTHERS, snuff manufacturers. (See Cliftondale.)

SAVIN HILL, 3 miles from Boston on the Old Colony & Newport Railroad. For list of manufacturers, see Dorchester and Boston.

SAXONVILLE, 21 miles from Boston, and 30 from Worcester. A village at the terminus of the Saxonville Branch, located in the town of Framingham.

J. D. HAMMOND occupies two roms, 10x20 feet, in a two story wooden building, for the manufacture of brogans. Commenced business in 1865. Has nine employees.

SAXONVILLE MILLS. This mill is run by Boston capitalists; manufacturing a variety of woolen goods and such articles in the woolen line that promise to pay the best. The mill was established here many years ago, and has been run by different corporations. The motive power is water and steam. J. W. Blake, of Boston, Treasurer.

SHAKER VILLAGE, 46 miles from Albany and 154 from Boston, on the Boston and Albany Railroad, contains about 400 inhabitants.

SHARON, 17½ miles from Boston, 26 from Providence, a station on the Boston & Providence Railroad. Mashapoag pond, in this town, is one of the sources of Neponset river.

P. H. BAKER, manufacturer of boots. This establishment employs about 12 hands, occupying 1 wooden building 24x36 feet, 2 stories, and produces an average of 500 cases of boots annually.

A. G. & C. D. HICKSON, situated on Pond street, manufactures boots of fine quality. They employ about 34 hands, occupy 1 building, wood, 2 stories, and do a business amounting to $77,000 per year.

CHARLES WINSHIP, manufacturer of boots, employs about 30 hands, occupies 1 building, wood, 2 stories, and produces about 100 cases per month.

G. R. & W. R. MANN, manufacturer of cotton belting duck. This business was established in 1848. The firm employ 30 hands, consume about 3,000 lbs. of cotton per week, and produce from 2,500 to 3,000 lbs. of duck during same period. The power of these works is furnished by 1 water wheel 10 feet long. Two buildings, brick, one 3 stories 42x84 feet and one 2 stories 26x42 feet, are occupied for the manufacture of the above.

SHEDD'S CROSSING, a flag station on the Lowell and Lawrence Railroad, between Haggett's pond and Tewksbury Junction. The State Alms House is located here and contains about 700 inmates, of which 200 are insane. This station is in the town of Tewksbury.

SHEFFIELD, 79 miles from Bridgeport and 31 from Pittsfield, a station and town on the Housatonic Railroad and river. The village has 2 churches. The town of Sheffield is very pleasantly situated on both sides of the river, which meanders circuitously and slowly through the town and forms large tracts of rich, alluvial meadows. In large freshets the river overflows its banks, to a great extent and forms the appearance of a large lake. This is the oldest town in the county of Berkshire. Incorporated 1733.

SHELBURNE FALLS, 69 miles from Fitchburg, 119 from Boston, and 17 from Hoosac Tunnell, a village of about 3000 inhabitants, situated in the towns of Shelburne and Buckland, on the Deerfield River, and on the Vermont and Mass Railroad. The village contains 4 churches, 1 national and 1 savings bank.

THE LAMSON & GOODNOW MANUFACTURING COMPANY, situated on the Buckland side, was incorporated in 1851, capital $300,000. E. G. Lamson, President, F. A. Ball, Treasurer, and J. W. Gardner, Agent, manufacturers of every description of pearl, ivory, horn and wooden handle table cutlery, butchers' knives, cooks' knives, shoe knives and pocket cutlery. Also, at Windsor, Vt., Lamson's patent wood and iron snaths. This last branch of the business was established some 50 years ago by Silas Lamson, father of the present Lamsons, who commenced the manufacture of cutlery some 23 years ago in a small way, employing about 30 men, from that time until now the business has continued to increase.

At the present time they employ 450 men, in the production of cutlery alone, producing 36,000 dozen per month. At their Windsor works, they employ about 75 men, and produce 665 dozen snaths per month. Their factory here covers a space of 4 acres, the buildings are arranged so as to form a hollow square, all of brick with slate roofs, one, two and three stories high. The machinery is driven by two 18 feet overshot water wheels and an 80 horse power engine, made by the Putnam Machine Co., furnished with steam by flue boilers of 150 horse power capacity, which also furnish steam for heating the buildings. In the Agent's office there is a steam guage, which indicates the pressure of steam on the boilers, the boilers being 130 feet from the office. The Agent has also speaking tubes running from his office, all over the works, by which he is enabled to be in communication with his overseers in the different departments.

The leading feature in the production of this firm is the amount and quality of fine pearl and ivory goods produced, they being the largest producers in this country. They do their own silver plating, each dozen of their knives being weighed before entering the plating vat and after leaving it. Thus enabling them to warraut there plate on each lot sold. The carvings on handles with busts of prominent men, is all done at their works by an artist which they employ, samples of work were shown us of Washington and Napoleon, which were faultless. Also samples of other work which was done with a great deal of neatness and in the most work man like manner.

H. S. SHEPARDSON & Co. commenced business in 1868, for the manufacture of gimblets, bits and bit braces, and amateur case tools. The business was established by Sargent & Foster in 1852. Messrs. S. & Co. occupy a 3 story building 31x60, and foundry 36x50, 1 story; employ 25 hands, turning out 30,000 gimblets and bits, 1,500 bit braces and 200 cases amateur tools per month. The motive power is furnished from a 15 horse power turbine wheel 5 feet diameter under 10 feet fall.

THE YALE & WINN MANUFACTURING CO. have removed their business from Shelburne Falls, Mass., to Stamford, where it will be carried on a larger scale than before.

SHIRLEY, 40 miles from Boston, and 10 from Fitchburg, a village and town on the Boston and Fitchburg Railroad. The village contains 800 inhabitants and 3 churches. This town is separated from Groton and Harvard by the Nashua river and from Pepperell, by the Squanicook, a branch of the Nashua. There are some elevations in the town but of warm and fertile soil.

EDGARTON, MILLS, situated about one half mile from the Depot. This mill is owned and run by Messrs. Munson & Edgarton, for the manufacture of light sheetings, 68 picks. The factory is 114x45, 4 stories with boiler-house attached, 10x20, 1 story. The mill is heated from a tubular boiler, made by John Lally, of Boston. The motive power is furnished by a 65 horse turbine wheel, 4 feet diameter; 4 feet fall. The company run 3200 spindles, 80 looms, employing 50 hands. They use about 3000 lbs. cotton, turning out 12,000 yards per week.

C. W. & J. E. SMITH, FREDONIA MILLS CO. Established 1838. They occupy a 3 story building, 33x115 feet, for the manufacture of 36 inch coarse sheeting. Use 3,000 spindles, 62 looms and 36 picks; consume 156,000 lbs. cotton, and produce 700,000 yards goods per annum. Their power is derived from a 18x13 water wheel, under 13 feet fall.

SILVER HILL, 15 miles from Boston and 35 from Fitchburg. A flag station on the Boston and Fitchburg Railroad.

SLAB BRIDGE, 10 miles from New-Bedford, on the New Bedford and Taunton Railroad. A country station.

SMITH'S FERRY, 13 miles from Springfield and 4 from Northampton. A station on the Connecticut River Railroad, in the town of Northampton.

SOMERSET is situated on the Taunton Great River and on the Old Colony & Newport Railroad, 10 miles from Taunton and 5 miles from Fall River. This village has 3 churches and about 2,000 inhabitants.

THE MOUNT HOPE IRON WORKS, the principal buildings of which were destroyed by fire September 21, 1867, have commenced operations again. The works as now constructed are of about the same capacity as before the fire, and includes the rolling mill, nail factory, foundry, machine shop and blacksmith's forge. The business of this concern is the manufacture of plate iron, nails and machinery. This company also own and run a charcoal refinery, at East Bridgewater, which produces annually from 300 to 400 tons of blooms. The foundry and machine shop were not destroyed by the fire mentioned. The first name building was moved to its present position and enlarged in the spring of 1866. It is 42x90, with a wing 25x65. It contains 2 cupolas, a brass foundry, core oven, patent crane and all the essential fixtures of a well appointed foundry.

The machine shop building, which was erected in the fall of 1866, and occupies the former site of the foundry, is a substantial brick building 45x120, with two wings; one 30x 40, for an engine room, the other 35x50, for a blacksmith's forge. About two-thirds of the shop is occupied by machinery. The power is furnished by a vertical steam engine of about 10 horse power. The principal business of this shop is, the manufacture of rolling and nail mill machinery, fibre dressing machines and repairs. The rolling mill which was built in 1866, on the site of the old mill, is 202x110. This building contains a horizontal condensing engine, 34 in. cylinder, five feet stroke, to drive the rolls, &c.; the other, a small horizontal engine for the operation of machinery for manufacture of iron direct from the ore, by the "Rogers' process." The large engine is a model machine for simplicity, strength and durability, and is from the Hope Iron Works, Providence, R. I. On each side of and above the engine, is a water tank of 4,900 gallons capacity. In the construction of this building there were used 100,000 feet of timber, 170,000 feet of long timber, 230,000 shingles, 4 tons of cast iron, and nearly 2,000 wrought iron bolts.

A horizontal Corliss engine, 18 inch cylinder, 4 feet stroke, supplies the power. There are also a pattern shop, a cooper shop and several store houses, all of which place under roof about 1½ acres of land. The capacity of the rolling mill and nail factory is about 40 tons of finished plate iron, and 20 tons of nails per day. About 5,000 tons of iron, 8,000 tons of coal and 700 tons of iron ore are annually consumed. The works employ about 250 men, and the business of the company previous to the fire was about $500,000 per annum. The capital invested is about $300,000. The machinery used, except the engines, was built in the company's machine shop. The works, as a whole, have been built up under the direction and superintendence of the Agent and Treasurer of the company, J. M. Leonard, Esq., and are said to be as complete and well arranged as any iron works in New England.

David P. Purrington, manufacturer of earthen ware. Business established by his father about the year 1800. Succeeded his father in the year 1853.

Somerset Potter Works, Leonard Chace, President.—These works were established in the year 1800; incorporated in 1847. Capital $25,000. All kinds of stone ware and fire bricks are manufactured here. They employ from 25 to 30 hands, and consume 800 tons of stone ware clay, and from 2,000 to 3,000 tons of material for making fire bricks per year.

J. & E. D. Gibbs, manufactdrers of boots and shoes. This firm employ about 10 hands, and occupy one building, wood, one story, 23x28. This firm established business in 1865. Mr. J. Gibbs settled here about the year 1852. They manufacture at the rate of 30 pairs of shoes per day, and consume about $400 worth of leather per month. They are using a machine made by McKay Sewing Machine Association, of Boston. (Office, 62 Congress street.) This machine, it is said, is capable of sewing 200 pairs of shoes per day.

Somerset Co-operation Foundry Co., Wm. Homer, President and Agent; E. A. Davis, Treasurer. This company employ about 30 hands, and occupy 2 buildings. Foundry 110 x 45; mounting shop 110 x 45. They make about 5,000 stoves, and consume about 700 tons of iron per year. The Boston Stove and Foundry Co. was established here about 1850 and continued till about the year 1867, when the Somerset Co-operation Co. started. The capital of this company is $20,000. This is the only company manufacturing the following:—Paramount, Progress and Revere cook stoves. They also make the Brownell cylinder and Pacific ranges. They are now making the celebrated Planet cook stove.

SOMERVILLE,

2 miles from Boston, a village and town on the Eastern, Boston & Maine and Fitchburg Railroads. The town contains 12,535 inhabitants and 9 churches. It was incorporated in 1842. Located on the tide water of Miller's Creek and Mystic river, which are navigable for small vessels. The village is connected with Boston by steam and horse cars, and contains the residences of many of the merchants of Boston. There are 2 halls, 1 high and 3 grammar schools, besides other institutions of learning located here, including Tuft's College, a new Universalist Institution.

B. F. Sylvester & Co. occupy a wooden building 100x 40 feet, store house 30x20 feet, located on Franklin street, for the manufacture of railroad and ship spikes; commenced business in 1858; employ 17 hands; machinery is driven by a steam engine 15 horse power with 1 flue boiler built by S. Ashton of Lowell. They turn out 4 tons of spikes per day.

Amos Haynes occupies a wooden building, 2½ stories, 108 x42 feet, also a brick building 40x50 feet, located on Myrtle street, for the manufacture of white wine and cider. Commenced business in 1848; employs 20 hands. His machinery is driven by an engine of 6 horse power, with 1 locomotive boiler built by Thomas Cunningham, of Charlestown.

The Middlesex Bleachery and Dye Works cover five acres of land. The size of the buildings occupied by them are as follows:—The first building, 1 story high, is 250 x 60 feet, one-half stone, 150 x 70 feet. Dye house 100 x 60 feet, with an L 100 x 60 feet. Two dry sheds—one 200x 40 feet; the other, 160 x 40 feet. The print shop 180 x 60 feet; machine shop 20 x 40 feet. They are located at Milk row, for dyeing, bleaching and printing. The business was commenced in 1801. They employ 160 hands, manufacturing 75 cases goods per day, and dye, bleach and print 35 million yards of cloth yearly, using 12 tons of coal daily. The power is furnished by steam engines of 500 horse power, and by 13 tubular boilers of 780 horse power. James Lee, jr., proprietor.

North, Merriam & Co.'s abbatois or slaughter house is situated on Medford street, near East Cambridge. This firm commenced business in 1867. Their main building is 220x 80 feet, 2½ stories. At the lower end of this building are the hog pens, with tracks laid from the Boston & Albany and Boston & Fitchburg Railroads.

The slaughter house is situated in the third story, where the hogs are slaughtered and slid through to the second, where they are finished, then suspended on parallel "runs," or delivered to wagons by a shoot. On the first floor is the packing room, and, in a room partitioned off is their lard oil factory, containing 15 hydraulic presses, producing about 65,000 gallons oil per year. They cure about 60,000 hams, besides nearly 1,000,000 pounds per year. They employ 75 hands. The motive power is furnished from a 15 horse pôwer engine, made by Rawson & Hittinger, of Cambridgeport, furnished with steam from a tubular boiler, made by Kendall & Roberts, of the same place. Do business amounting to $600,000.

The Union Glass Co., Capital $200,000, occupy 3 acres of land, near the Fitchburg Railroad, for the manufacture of flint glass of every description. Commenced business in 1854; employ 250 hands. Their machinery is driven by a steam engine, 25 horse power, with 1 horizontal boiler 50 horse power, built by Allen & Endicott, of Cambridgeport. Their average product is $35,000, and consume $22,000 worth of raw material per month.

Wm. R. Bradford occupies a wooden building 150x80 feet; pattern house 50x50 feet, located corner of Washington and Myrtle streets, for the manufacture of castings. Commenced business in July, 1858; employ 30 hands.

His machinery is driven by an engine, 10 horse-power, with 1 flue boiler, built by the Globe Works, of South Boston. Consumes 100 tons of iron per month, and does business amounting to $60,000 per annum.

SOMERVILLE CENTRE, 2½ miles from Boston, a station on the Woburn Branch Railroad.

SOUTH ABINGTON, 21¼ miles from Boston, on the Old Colony and Newport Railroad, situated in the town of Abington. The village contains some two or three churches, and the inhabitants are engaged largely in the manufacture of boots, shoes, tacks and rivets.

DUNBAR, HOBART & WHIDDEN, successors to B. Hobart & Son, manufacturers of tacks, brads, shoe nails, silvered and japanned lining nails. This business was established in 1810, by Benjamin Hobart, Esq. This house was Benjamin Hobart, till 1849; and Benjamin Hobart & Son, from that time till 1857; the senior partner then retired, and business continued under the firm style of Messrs. Dunbar & Hobart up to 1865, when the present firm of Dunbar, Hobart & Whidden was formed.

The tack manufactory was erected in 1864, by William H. Dunbar, of Boston, the senior partner, at a cost of $100,000: is built of brick, the front consisting of a two story building 138x48, running northerly, and connecting with which is the main manufactory 334x67, one story high, possessing the advantage of having all the machinery on the ground floor; through the centre of which runs a railroad track, used to transport metal in its different stages, from the rear of the building, where it lies in strips and plates, to the front where it comes out in every variety of finished articles.

A noticeable and important accessory is the engine manufactured by the "Corliss Steam Engine Co.," of Providence, R. I., of 150 horse power, with 3 boilers which furnishes motive power for the machinery and heat for the building. This engine is capable of furnishing power to run 300 machines. In the building where heel and toe plates are made about 20 hands are employed who turn out some 300 pairs of these irons daily. In the machine shop are manufactured all the tack machinery, and machinery for making heel and toe plates. Twenty-four machines for leathering tacks, 20 capping machines for lining the heads of tacks for saddlers and carriage makers' use. This is the only firm in this branch of business who manufacture their own machinery. The tack room is large enough to contain four rows of machines to the number of 300, most of these are running and the balance being made. They make about 400 kinds of tack nails.

The front building which is 2 stories high, is used partly for the counting room of the firm and packing room on the first floor, above are 24 machines for leathering tacks, cutting the leather and putting it on the tack, being done by one operation, also several machines for putting silver plated or brass linings on the heads of tacks for carriage makers' use. Of these machines, this firm holds the patent right.

From 50 to 75 girls are employed leathering and labelling tacks, and when the works are under full headway, employment is given to 300 hands.

A boarding house and several dwelling houses in the immediate vicinity are owned by the firm, and others are being built for the use of the workmen.

This firm were the first in the country to make shoe tacks, of which they claim to be the largest manufacturers. The amount of capital invested in this enterprise is very large. The sales amount to $350,000 yearly. Their goods go to all parts of the United States, Canada, and South America, and they are now having large orders from England, for Hungarian and other kinds of shoe nails. This manufactory has a capacity of turning out from 2,000 to 2,500 tons of tacks, brads and shoe nails yearly. The unusually long experience of the old firm has been brought into requisition to make this factory the most complete and convenient of its kind in this country. To enable them to receive and deliver freight with dispatch an act was passed by the legislature authorizing the construction of a branch from the Old Colony and Newport Railroad to their manufactory. These and other unusual facilities enable them to take a leading stand in the tack manufacturing business in the United States.

MESSRS. ALLEN & SOULE, manufacturers of boots and shoes are located on Washington street, near the Post Office. The business was established here by Mr. C. F. Allen in 1865. In 1868, Mr. Josiah Soule, Jr., associated himself with Mr. Allen, since which time the business has been carried on under firm style of Allen & Soule. This firm employ about 30 hands; do a business amounting to $30,000 and have capacity for turning out 1,000 cases of boots and shoes per year.

J. L. NASH, manufacturer of boots and shoes, commenced business here in 1864, employs 160 hands and does a business amounting to $300,000 per annum. The power of this establishment is furnished by a steam engine of 12 horse power, manufactured by the Corliss Steam Engine Co. of Providence, R. I. This manufactory is situated in Abington Centre, adjoining which are North, East and South Abington, all forming the town of Abington. The building occupied by Mr. Nash was formerly a public house known as the "King House," and is exceedingly well adapted for his business. His main building is 3 and 4 stories, wood 30x50 with wing 20x30 and L 30x80. He has a capacity for turning out 1,000 pairs per day; consumes about $160,000 worth of stock and produces on an average 150,000 pairs of boots and shoes per year.

NAHUM REED, manufacturer of boots and shoes, is located on Washington street, opposite the post office. Mr. Reed established business here in 1850. In 1865 the firm was changed to H. Reed & Son, and again in 1867 to N. S. Reed. This firm occupies 1 building 3 stories high; employs 125 to 150 hands, and does a business amounting to $100,000 per year. Have a capacity of turning out from 190 to 200,000 pairs per annum.

JAMES ARNOLD, manufacturer of shoes, established business here in 1868. Employs 16 hands, and turns out on an average 100 pairs per day. The manufactory is situated on Temple, near Washington street.

SOUTH ACTON, 25 miles from Boston and 25 from Fitchburg. A village of about 400 inhabitants, situated in the town of Acton at the junction of the Marlboro' Branch with the Boston and Fitchburg Railroad. The town of Acton is a pleasant farming country, with a good soil. The Assabet river passes through it. The town was incorporated in 1739.

WM. SCHOULER manufactures flannels, table covers and satinets. He occupies a building 50x40 feet, 2 stories, basement and attic, with dye house and other out buildings, situated half a mile from the depot. Near the mill is the repair shop, where all the jobbing is done. The mill receives its power from a water wheel under 17 feet fall; the repair shop also, from a water wheel under 7 feet fall.

SOUTH ADAMS, 14 miles from Pittsfield and 6 from North Adams, a village in the town of Adams, containing 4 churches and a population of about 800 inhabitants. Adams is a flourishing agricultural and manufacturing township. The Hoosack river passes through the town. Incorporated 1778.

P. Blackinton & Co., manufacturers of woolen cassimeres. Commenced business in 1868, in a 3½ story brick building 140x52, wing 66 x 36, 2½ stories. Dry and boiler house 66x50, 1 story;—2 flue boilers, made by Campbell, Whittier & Co. Picker house 36 x 70, 2 stories. Six set mill; employ 90 hands, and turn out 16,000 yards cloth per month. The machinery is driven by a 76 horse power turbine wheel.

Richardson, Upton & Co., manufacture ladies' extra and superfine papers, occupy a building 182 x 41 feet, four stories with machine room attached 72x26 feet, two stories; bleach house 35 x 37 feet, three stories; boiler house 27x33 feet, 1 story; 2 tubular boilers, made by Campbell, Whittier & Co., and 1 flue boiler. Employ 70 hands, and turn out 1½ tons of paper per day. 2 turbine wheels, of Leffel's pattern, of 140 horse power furnish sufficient power to drive the machinery.

L. L. Brown & Co. commenced business in 1850 for the manufacture of ledger paper; occupy a 3 story building 280x60 feet; employ 70 hands, turning out 1 ton paper per day. They derive their motive power from a 50 horse turbine wheel and one of Woodruff & Beach's 80 horse steam engines; 1 tubular boiler, made by A. Lang, of Pittsfield. They also run another mill 200x50 feet, 3 stories; machine room attached 50x25 feet, 1 story. Washing mill 125x40 feet, 2 stories; employing 70 hands, and turn out 1 ton paper per day. Their motive power is furnished by a 50 horse turbine wheel and 75 horse breast wheel in washing mill. They have in case of necessity a 35 horse Tyler engine, with tubular boiler, made by A. Lang.

SOUTH AMESBURY. Not a station. See Amesbury.

William Chace commenced the manufacture of light top carriages in 1838. He occupies one 5 story building, 46x40. He employs 10 persons, and does a business of $15,000 per year.

SOUTHAMPTON. A village of about 200 inhabitants, on the New Haven and Northampton Railroad, 67 miles from New Haven and 28 from Greenfield. A farming district.

SOUTH ASHBURNHAM, 11 miles from Fitchburg and 45 from Greenfield, a village in the town of Ashburnham at the junction of the Cheshire Railroad with the Vermont & Massachusetts Railroad.

SOUTH BELLINGHAM, situated 32 miles from Boston and 38 from Southbridge, a country station of 8 houses on the Boston, Hartford and Erie Railroad.

SOUTHBORO', 28½ miles from Boston and 30 from Fitchburg, a village and town on the Boston, Clinton and Fitchburg Railroad. This town was taken from Marlborough in 1727. It has a good soil and is well cultivated. It is watered by a branch of Sudbury river. The Boston and Albany Railroad also pass through this town.

SOUTH BRAINTREE, 11½ miles S. by E of Boston, 55¾ from Newport, and 25 north, north east of Plymouth. The main trunk of the Old Colony and the Fall River Branch join each other here.

F. Jones & Co. manufacturers of boots and shoes, established in 1858, and employ 26 hands. They occupy 1 building, located on Tremont street, 2 stories, wood, 25x30 feet, and turn out from about 1,200 to about 1,500 cases per year. Messrs. F. Jones & Co. also have sales room at 102 Pearl street, Boston, Mass.

Holbrook, Hobart & Porter, manufacturers of boots and shoes. The business was established by Mr. Holbrook about the year 1838. About the year 1848 or 1850 the firm was changed to that of Holbrook & Arnold. In 1861 Mr. Arnold withdrew, the business continuing under Holbrook & Hobart, the latter having joined about 5 years prior to Mr. Arnold's withdrawal. Mr. Porter associated himself with this house in 1868 under firm style of Holbrook, Hobart & Porter. They employ 300 hands, and turned out in 1867 2,500 cases.

SOUTHBRIDGE. Situated on the Quinnebaug river, 70 miles from Boston, 42 from Providence and 230 from New York, at the terminus of the Boston, Hartford & Erie Railroad, has a population of about 4,000, including Globe Village, which is situated about half a mile above the depot.

At Sandersdale, two miles below Southbridge, and 68 from Boston, Mr. James Sanders commenced, in 1868, to erect buildings for a print works, consisting of 5 brick buildings, the names and dimensions of each are as follows: 1st, main building, 248x106, 2 stories. 2d, packing room building, 112x48, 2 stories. 3d, machine room, 263x58, 2 stories. 4th, engine and boiler house, 60x74, 24 ft. high. 5th, office building, 32x40, 2 stories.

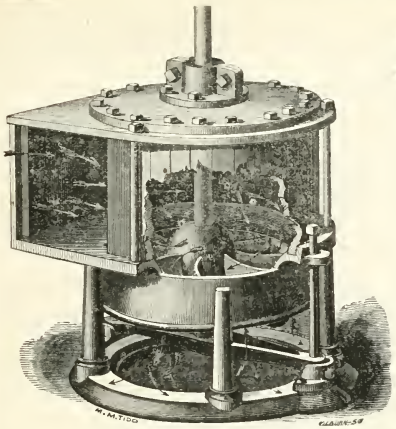
The print shop contains 12 machines. In the fourth building, engine and boiler house, is a 100 horse power engine, Babcock & Wilcox's patent, built by Hope Iron Works, Providence, and 11 boilers, 24 feet long, 7 feet diameter, built in Glasgow.

Columbian Co. This mill is owned and run by Henry T. Grant and Wm. Cunliff, Providence capitalists, for the manufacture of 64 square print cloths. They commenced business in 1866.

Their manufacturing buildings at present consists of two buildings, of 45x145, 2 stories, wood, and 48x50, 4 stories, brick. This company run 4,736 spindles, 108 looms, employing 100 hands. They consume about 208,000 lbs. cotton per year, turning out 27,500 cuts, or 2,475,000 yards.

The motive power is furnished by a 65 horse power Leffel turbine wheel, 54 inches diameter, with 10 feet fall. For heating the mill they have a tubular boiler, built by The Providence Steam and Gas Pipe Co., of Providence, R. I. W. A. H. Grant, Esq., resident agent.

Central Mill Co. This company was incorporated in 1863, with a capital of $50,000; C. A. Dresser, president; Wm. T. Foster, treasurer, and Henry B. Dresser, secretary. The business, the manufacturing of sheetings, 44 warp, 40 picks, 36 inch goods and carpet warp, twine and wicks. Were established in 1837, by the Central Manufacturing Co.



This cut shows the Iron Wheel with Wood Chamber, a section broken out to show the internal arrangement and section of the water, which is the same in each wheel.

TURBINE WATER WHEEL MANUFACTURING CO.

CHASE'S

IMPROVED, EXCELSIOR, JONVAL TURBINE

WATER WHEEL.

PATENTED JULY 31, 1866.

Warranted to give a superior per cent. of power to that from any other wheel, as shown from actual tests, by a Standard Dynamometer. These wheels have no guide plates, being thus unequalled in simplicity, convenience, durability and low price, as a first class wheel.

(See page 334.)

Chase's Celebrated Improved Superior

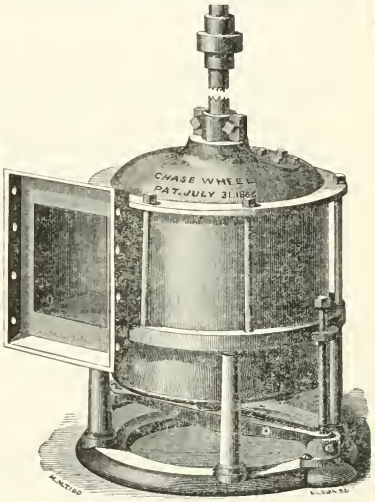
CIRCULAR SAW MILLS.

Surveys for Dams, Mill-Sties, &c. Cotton, Woolen, Paper, Lumber, Flouring and Grist Mills constructed.

☞ SHAFTING, GEARS, &C., AT SHORT NOTICE. ☜

For Circulars with Cuts representing, prices and description, please address

J. D. CHASE & SONS, Agents, Orange, Mass.



The above cut shows the perspective of the Iron Wheel and Chamber complete.

Their sheeting factory is a three story building 125x44, connected with the office and packing room a building 110x44, two stories. In this mill they run 6,800 spindles, and 141 looms, turning out 40,000 yds. goods per week, using about 8,000 lbs. cotton. Their machinery is driven by a 70 horse turbine wheel, 4 feet diameter, 21 feet fall. For heating their buildings, they have a tubular boiler made by Cunningham.

Their twine and warp factory is situated opposite the sheeting factory, being 100x32, three stories. They use to drive their machinery, a 21 ft. diameter, 12 ft. bucket breast wheel of 60 horse power. In this mill they run 984 spindles, using about 6,000 lbs. cotton for a week's production. They employ in both mills, 200 hands.

H. C. AMMIDOWN & Co. commenced the manufacture of steel spectacles and eye glasses in 1867. Their shop is situated about 20 rods below R. H. Cole & Co.'s, occupying a building 28x40 feet, 2 stories; employing 25 hands, turning out 10 gross per week. The motive power is derived from an 18 inch diameter turbine wheel with 7½ feet fall.

DRESSER MANUFACTURING CO., incorporated in 1834. C. A. Paige, agent and treasurer; C. D. Paige, superintendent, for the manufacture of four-quarter sheetings. Their main building is 30x70 feet, 4 stories, containing all their cotton machinery; running 2,376 spindles, and 50 looms. They use about 6 bales or about 2,700 lbs. cotton per week, turning out about 11,000 yards. The motive power is derived from an 80 horse turbine wheel, 4 feet diameter, 14½ feet fall. The privilege here is such that a mill of 400 looms on print goods, could be run.

Their cotton house is 30x30, two stories; one story for cloth room. Wood house, 50x18, one story; blacksmith's shop, 10x20, one story. They employ 50 hands. This company were the first who built in Southbridge, and people for miles around came to see this (then) new branch of industry.

R. H. COLE & Co., manufacturers of gold, silver and steel spectacles and eye glasses. Commenced business in 1863. The business was established by William Beecher, in 1833. They occupy a building, about two-thirds of a mile from the

KINSLEY IRON AND MACHINE COMPANY.

CANTON, MASSACHUSETTS.

Manufacturers of all sizes

Merchant Bar Iron,

LOCOMOTIVE FORGINGS, CASTINGS, MACHINERY, FINISHED WAGON AXLES, HUBS & AXLES, JIGGER OR CRANK AXLES, HALF PATENTS, LOOSE AND SOLID COLLAR AXLES, CROW BARS, CLAW BARS, PINCH BARS, RAILROAD SPLICES, DRILL MOULDS, FIRE BENDERS, TRUSS SHAPES, WINDLASS NECKS, LADLES, CAR AND TEND AXLES, CART BOXES, ETC.

OLIVER AMES, *President.* FRANK M. AMES, *Agent.* EDWARD R. EAGER, *Treasurer.*

POST OFFICE ADDRESS, CANTON, MASS.

depot, 38x46, two stories, ell 18x30, one story; employing 34 hands, and turning out about 18 dozen spectacles and eye glasses per day. Their motive power is derived from an 8 horse power engine with tubular boiler; also, 10 horse turbine wheel.

W. P. PLIMPTON & Co., manufacturers of spokes. They employ eight hands, producing from 16,000 to 20,000 spokes per month, and do a business of $10,000 yearly. They occupy a 3½ story building 80x40 feet. The power is derived from an Upton water wheel, having a fall of 9 feet.

LITCHFIELD & Co. established business in 1843. They occupy a building 66x28 feet, 2 stories and basement, with an addition 20x15, 2 stories, also an addition 54x15, one story. Have besides their main building, 3 large timber houses, where is constantly kept 2 years stock of timber, so as to have the timber they work thoroughly seasoned, without forcing, under cover. Manufacture exclusively shuttles and shuttle irons of all kinds. Employ 25 hands and do a business of $40,000 per annum. Their power is derived from one Whitney wheel 6 feet diameter and one 5 feet Wood wheel, under a fall of 6 feet. They make a speciality of their patent shuttles, and have no hesitation in stating it superior to any other; especially the bobbin spindle and catch, which adapts itself to various diameter of bobbing heads, without effecting the positive position of spindle, and also liberating itself positively from the crease in bobbin head by merely raising the spindle. It recommends itself after parties have given it a fair trial.

D. K. & M. K. OLNEY established business in 1866, for the manufacture of super phosphate of lime, bone dust, crushed bone and bone meal, for cattle and plaster. They occupy a 3 story building with basement, 64x32 feet, with 2 additions 24x14 feet, 1 story high. They employ from 8 to 10 hands. Amount of business per year, is $50,000. The power is furnished by a 30 horse power water wheel, 8 feet head, made by Upham.

AT FISKDALE, near Southbridge station, is the

SNELL MANUFACTURING CO., manufacturers of augers and auger bits, gimlets and boring machines. They occupy 3 buildings 48x140 feet, 3 stories, main shop 45x32 feet, 2 stories, with tower 4 stories attached to the main shop; store house 36x60 feet, 2 stories, attached to the wing of main shop by a walk from the second stories. Employ 68 hands, doing a business of $65,000 per year. The machinery is driven by water power.

SOUTH CANTON, 14¾ miles from Boston, a station in the manufacturing village of Canton, on the Stoughton Branch Railroad. (See also Canton.)

AMONG the oldest and most extensive iron and machinery manufacturers it has been our privilege to visit in this country, and ranking with the first, is the KINSLEY IRON AND MACHINE CO., of this place.

These works date back to 1787, at which time they were established by Messrs. Leonard & Kinsley, and since which time they have been in constant operation, undergoing, from time to time, such improvements as the constant increase of their business required.

This company was incorporated in the year 1855, with a capital of $200,000. Hon. Oliver Ames, president; E. R. Eager, treasurer; Frank M. Ames, resident agent. The rolling mill was erected in 1852–3, for the purpose of rolling car axles, and a beam engine of 190 horse power, and an 18 inch train of rolls put in.

In 1858, the idea of rolling car axles was abandoned, and one 14 in. and one 8 in. train of rolls were added, and the manufacture of iron commenced. In the summer of 1864, the beam engine was replaced by a horizontal condensing engine of 500 horse power, manufactured by the "Corliss Steam Engine Co.," Providence, R. I. The capacity of the rolling mill is about 4,800 tons annually, running days only, and 9,000 tons, running days and nights. It contains 4 double and 1 single puddling furnace, 7 heating furnaces, 3 trains of rolls, 3 engines, and 6 water wheels. In addition to the rolling mills, the works comprise a forge, a foundry, an extensive machine shop, &c. &c. The forge department contains 2 forge fires, 8 hammers, and 5 water wheels. This company make most of their machinery, and employ upwards of 225 hands. Tracks are laid through their works and the rail facilities for transportation are excellent.

This Co. consumed in 1867, 4,700 tons of pig iron, 3,100 tons wrought scrap iron, 350 tons cast scrap iron, 800 tons iron ore, 8,000 tons bituminous coal, and 500 tons anthracite coal, and produced 4,800 tons merchant bar iron, 1,200 forgings, 900 tons castings, 900 wagon and carriage axles, and 250 tons cross bars.

This company manufacture merchants' bar iron, forgings, machinery castings, and finished wagon axles of all descriptions. Their buildings cover one-and-a-half acres of ground, and their works ten acres. They use 16 cylinder and flue boilers, most of which are 36 inch and from 24 to 25 feet long. The steam is made by waste heat. The reputation attained by Canton as a manufacturing village, is attributed largely to the success of this mammoth establishment.

G. R. Crandon commenced the manufacture of hosiery, stockings and woolen yarn in 1864. He occupies a building 45x53, 4 stories. The mill is located on Mashapaug brook, with a fall of 9 feet. He runs 3 sets of woolen machinery, 25 stocking looms, consume 100 pounds of cotton and wool daily, doing a business of $50,000 per year.

The American Net and Twine Co. commenced the manufacture of nets and twines, seines, &c., in 1843. They occupy a building 160 x 38, 4 stories, wood. They employ 45 persons and run 2,000 spindles. The mill is located on Mashapaug brook, with a fall of 16½ feet. A breast wheel supplies the power. They consume 900 lbs. of cotton daily, and do a business amounting to $125,000 per year. Their store is at 43 Commercial street, Boston.

SOUTH DEDHAM, situated on the Neponsit river, 14¾ miles from Boston, 55¾ from Southbridge, and 38 from Providence, a thriving place of about 2,000 inhabitants and 3 churches, on the Boston, Hartford & Erie Railroad.

Lyman Smith & Sons commenced the manufacturing of calf and sheep rollers, for cotton factories; also, blank glove and law leather, in 1853; occupy a 4 story building 120x40, L 40x20, 1 story; wing 30 x 60, 3 stories; store house 30 x 25, 1 story; employ 40 hands; turning out 150,000 sheep skins, 10,000 calf skins per year, using 600 cords hemlock bark and 150 casks extract bark, and about 20 tons sumac per year.

The motive power is furnished by a 20 horse steam engine, with tubular boiler, built by Campbell, Whittier & Co., of Boston.

Gay & Morse, manufacturers and dealers in foreign and domestic glues. This business was started in 1867, under the name of Wm. H. Gay & Co. In March, 1868, the name was changed to Wm. S. Gay & Son, and on January 1st, 1869, the present firm was started. They occupy the following buildings: Glue factory, main building 20½x27½ feet, 1½ story with wings on two sides of one story, making the building on the ground 32x35 feet, dry house 22x50 feet, 2 stories, and store house 16x36 feet. The manufactory is situated on Fulton street, about 5 minutes walk from South Dedham Station.

Isaac Ellis & Co.'s mills are located on the Boston and Providence old road, on the line between the towns of Dedham and Walpole, about ¾ of a mile from Winslow's Station, on the Boston, Hartford and Erie Railroad. The firm was established in 1832. They occupy the following buildings for the manufacture of binders' board: main building 35 x79 feet, 1 story and basement with two wings 25x35 feet each, rolling mill 26x50 feet, stock house 28x40 feet. Employ 15 hands, consume from 400 to 500 tons stock, and produce from 350 to 400 tons board per annum. A 40 horse power water wheel, assisted by a 25 horse power Bird's engine drive their machinery.

Lewis Smith, Jr. established business November, 1867. He occupies a building 21x23 feet with an L 21x12 feet, for the manufacture of all kinds copper, brass, composition and German silver castings. Employs from 6 to 8 hands, and does a business of about $30,000 per annum.

Willard, Everett & Co. occupy a 3 story wooden building 150x40 feet, with L's, out-buildings, &c., covering 15,000 square feet, for the manufacture of plain and rich extension tables and fashionable furniture. Commenced business in 1826. Have an average of 200 employees. Their machinery is driven by a 40 horse power engine, built by the Atlantic Works, of East Boston, with one flue boiler, 50 horse power, built by Campbell, Whittier & Co., of Boston, Mass.

SOUTH DEERFIELD, 28 miles from Springfield and 8 from Greenfield, a small country village on the Connecticut River Railroad. The population is about 2,500, contains 2 churches.

Pease & Ruddock commenced in 1858, for the manufacture of wallets and pocket books. They occupy a building 50x18 feet, employ from 40 to 50 hands and do a business of about $70,000 per year.

SOUTH DENNIS, situated 86 miles from Boston and 7 from Orleans, on the Cape Cod Central. West Dennis, a village which adjoins, and to many strangers, would be considered a part of South Dennis, is situated near the coast. The two villages combined have a population of about 800 and contain 3 churches.

SOUTH FITCHBURG, 1 mile from Fitchburg and 25 from Worcester, on the Fitchburg and Worcester Railroad, a flag station. (See also Fitchburg and West Fitchburg.)

SOUTH FRAMINGHAM, 21 miles from Boston and 23 from Worcester, a village in the town of Framingham, on the Boston and Albany Railroad, and at the Junction of the Milford Branch with the main road. The town of Framingham is large and flourishing, with a fine soil and pleasant ponds. The town has 6,000 inhabitants and 4 churches. The Boston, Clinton and Fitchburg Railroad also passes through this town.

A Clark & Son occupy a 2 story wooden building 48x25 feet with 2 ells 57x16 and 20x16 feet, and a 2 story wooden

building 32x17 feet, for the manufacture of Shaker hoods, of which they turn out from 20,000 to 30,000 per annum. Also occupy at Boston, the upper floor of 4 story brick building 100x60 feet, located at No. 106 Sudbury street. This firm employ on an average 200 hands and do a business of $75,000 per annum.

GEORGE RICHARDSON & SON, occupy a 3 story wooden building 35x70 feet, 2 wings, one 3 stories 30x30 feet, and one 2 stories 34x34 feet. Commeneed business in 1845, for the manufacture of straw and velvet goods of every description. This firm manufactures their own gas for lighting their buildings; also, heat their buildings with same. They employ 300 hands; do a business of $175,000 per annum.

B. F. BATCHELDER occupies a 4 story wooden building 36x60 feet, located at East Holliston, Mass., reached from this station. Commenced business in 1826, for the manufacture of boots and shoes. Employs 30 hands; turns out 100 cases of boots and 25 cases of shoes per month; and consumes 375 sides of leather; does a business of $50,000 per year.

F. S. PRENTICE occupies 6 rooms in a three story wooden building, for the manufacture of ladies', misses' and children's morocco, goat and calf lace bootees and balmorals. Commenced business about 1852; employs 35 hands; turns out 1,000 cases of shoes per year, and does a business amounting to $100,000.

AUGUSTUS RICHARDSON occupies a 3 story wooden building 40x70 feet with an L 30x70 feet, located on Main street, for the manufacture of ladies' and children's straw, felt and velvet goods. Commenced business in 1850, and employs during the busy season about 600 hands.

SOUTH HANOVER, 23¼ miles from Boston, a country station on the Hanover Branch of the Old Colony and Newport Railroad.

L. C. WATERMAN & Co. occupy 3 buildings about half mile east of the depot on Indian Head river, for the manufacture of Swedes iron tacks and nails, commencing here in 1860. The works are run by a 3½ feet turbine wheel, the fall being 14 feet. They consume 75 tons of iron yearly, run 18 tack machines; employ 16 persons and do a business of $30,000 per year. This company make a speciality of using Swedes iron exclusively.

E. Y. PERRY & Co. commenced the manufacture of tacks and shoe knives in 1854. They occupy 6 buildings near the depot, located on Indian Head river, with a fall of 9 feet. Two turbine wheels supplies the power. This company employ 50 persons; consume 300 tons of iron and 150 tons of spelter and do a business of $100,000 yearly. They take the production of a mill at Plympton, Mass.

GEORGE CURTIS occupies one building one mile east of the station, for the manufacture of anchors and ship work. He employs 12 persons and consumes 5 tons of iron per week. The works are on the Indian Head river the fall being 8 feet. He commenced here in 1863, a forge has been here for over half a century.

SOUTH LANCASTER, 28 miles from Nashua and 18 from Worcester, a village of about 1,500 inhabitants, on the Worcester & Nashua Railroad, in the town of Lancaster, Worcester county.

SOUTH LEE, 154 miles from New York, 64 from Albany and 166 from Boston, in the town of Lee, Berkshire County, on the Housatonic river. The village has 250 inhabitants and 1 church, located in a valley with mountains towering on every side.

HURLBUT PAPER Co., incorporated 1864, with a capital of $60,000. The business was established by Owen & Hurlbut, about 40 years ago. Their main building is 130x30, 3 stories, building attached 40x50, 2 stories; 2d building, 20x30, wing 40x30, 2 stories; machine room 75x20, 1 story. On the other side of the river, 3d, 75x40, 2½ stories. This company employ about 100 persons and consume about 6,000 lbs. rags daily. Their motive power is derived from 8 Parker wheels. They use for heating purposes and washing stock 3 tubular boilers made by Clary, Sedgwick & Russell of Pittsfield, Mass.

SOUTH MALDEN, 3 miles from Boston. A village at the intersection of the Saugus Branch with the Eastern Railroad, containing 1,700 inhabitants and 2 churches. The number of children attending school is 460, and the number of voters in the village, 539.

SOUTH MARLBORO', 31 miles from Boston and 27½ from Fitchburg, a station on the Boston, Clinton and Fitchburg Railroad.

SOUTH MIDDLEBORO', 8¼ miles from Middleboro', on the Cape Cod Railroad, a flag station for the accommodation of the people living in that vicinity of the town of Middleboro'. Near the depot there are about 50 inhabitants.

SOUTH MONTAGUE, 95 miles from New London and 5 from Grout's Corner, a station in the town of Montague, Franklin Co., on the east bank of the Connecticut river and on the New London Northern Railroad.

SOUTH QUINCY, 8½ miles from Boston, a station on the Old Colony & Newport Railroad, in the village and town of Quincy. (See Quincy.)

SOUTHVILLE, 28 miles from Boston and 16 from Worcester. A station in the town of Southboro', on the Boston and Albany Railroad.—This town was taken from Marlboro', in 1727. It has a good soil and is watered by a branch of Sudbury river.

W. B. NICHOLS & Co. occupy a two story wooden building 30x60 feet, with basement, for the manufacture of satinets. Established October, 1864; have 13 hands, 1 set satinet machinery, and turn out 1,200 yards per week. Power furnished by a turbine water wheel.

NEWTON & HART occupy a 2½ story wooden building 22x100 feet and basement, for the manufacture of Congress boots and shoes. Commenced business in 1863. Power furnished by a 3 horse power caloric engine, Roper's patent.

JOHN HART & Co. occupy a 2½ story wooden building 36x100 feet and basement, for the manufacture of boots and shoes. Commenced business in 1851, employ 75 hands, and turn out 1,900 cases shoes and 1,400 cases of boots per annum. Power furnished by a 3 horse power caloric engine, Roper's patent.

SOUTH WAREHAM. This village of about 200 inhabitants, is situated 47¼ miles from Boston and 32 from Hyannis, on the Cape Cod Railroad. The business carried on in this village is the manufacture of nails.

SOUTH WEYMOUTH, 15 miles from Boston, on the Old Colony and Newport Railroad, in the township of Weymouth.

JOSIAH REED & Co., manufacturer of boots, located on Union near Pleasant street. Business was established here by Messrs. Bates & Reed in 1850, about the year 1853 Mr. Bates withdrew. In 1865 Mr. D. F. Reed was admitted under firm style of Josiah Reed & Co. They employ from 40 to 50 hands, occupy 1 building, wood, 2 stories 65x28, and turn out from 1,000 to 1,500 cases per year.

CURTIS & HOWE, manufacturers of boots and shoes, business was established here by Mr. John Curtis in 1863. In 1866, Mr. Howe was admitted. This firm is located on Main near Pleasant street, and employ on an average 10 men. They occupy one building, wood, 2 stories 28x36, have capacity for turning out 18 to 20 cases per week, and do a business amounting to $30,000 per year.

MESSRS. C. & P. H. TIRRELL & Co., manufacturers of boots, occupy 1 building 2½ stories high, wood, 40x28, located on Main street. Messrs. C. & P. H. Tirrell established business in 1854. In 1867 Mr. Henry Edwards became associated with them and the business carried on under the firm of C. & P. H. Tirrell & Co.

This firm do a business of from 2,500 to 3,000 cases per year, and consume nearly 10,000 lbs. of calf and sole leather annually.

FOGG, HOUGHTON & COOLIDGE, manufacturers of boots. Mr. Fogg established business here about the year 1843. In 1854 the firm changed to Fogg & Houghton. Mr. Coolidge was admitted in 1860. They employ 90 hands; consumed last year about 125,000 lbs. of calf and sole leather, and produce about 60 cases of boots per week. This firm have an office at No. 64 Pearl street, Boston.

JAIRUS WHITE & SON commenced the manufacture of boots and shoes in 1865. They employ 20 persons and do a business amounting to $25,000 per annum.

HENRY SHAW, boot and shoe manufacturer. Business established in 1854; manufactures gents' fine calf boots, employs 25 hands, turns out 20 cases boots per week, and does a business of about $40,000 per annum.

SOUTHWICK, situated 54 miles from New Haven and 41 from Greenfield, containing about 200 inhabitants, 1 church, on the New Haven and Northampton Railroad.

SOUTH YARMOUTH, situated 81 miles from Boston and 12 from Orleans, on the Cape Cod Central, containing about 800 inhabitants and 3 churches.

SPENCER, 138 miles from Albany and 62 from Boston. A village of about 3,000 inhabitants, situated 2 miles from the station, in a town by the same name on the Boston and Albany Railroad. The village has 4 churches. This town is situated in Worcester county, on Seven Mile river, a branch of the Chicopee. The town is quite elevated for the section of the country in which it lies. It lies between the waters of Boston harbor and Connecticut river, the summit level where the rivers have their source, 950 ft. above the former, and 880 above the latter. The soil is fertile and cultivated by men who are educated and independent.

D. A. DRURY & Co. established business in 1868. They occupy a four story building 60x28 feet, for the manufacture heavy and fine kip and calf boots. They employ from 50 to 75 hands, and produce daily from 150 to 200 pairs boots.

PROUTYS & KENT, of this place, are manufacturers of men's, boys' and youths' western and kip boots. They occupy a building 2 stories in height 40x60 feet, with basement; employ 30 hands, produce 150 pairs daily, and do a business of $75,000 per annum.

KENT & BACON commenced business in January, 1866, for the manufacture of thick, kip and calf men's, boys' and youths' boots; occupy a 3 story building 28 x 75 feet, and employ hands enough to produce 200 pairs per day.

WM. UPHAM, manufacturer of cassimeres and cotton warp, established the business in 1860. He occupies a building 34 x80 feet, employs 40 hands, running 2 sets, 24 looms, producing 1,000 yards daily, doing a business of $125,000 yearly. The power is furnished by an engine of 25 horse power. The factory is located on Seven Mile river, and has a fall of 20 feet. Aborn & Baldwin, Agents in New York. Dodge Bros. & Co., Agents in Boston.

J. GREENE & Co., manufacturers of men's, boy's and youths' thick boots. The business was established in 1812. They occupy a 3 story building 24x60 feet, employ from 40 to 60 hands and in the busy seasons turn out 200 pairs per day. This firm are also wholesale dealers in boots and shoes, having a store in St. Louis, Missouri, at 500 North Main street.

BUSH & GROUT occupy a 3 story and basement building 67x35 feet, for the manufacture of men's, boy's and youths' boots and shoes, employing 65 hands, and turn out 150 pairs per day. Doing a business of $80,000 per year. Business established in 1846.

SPRING DALE, 15¾ miles from Boston, a country station on the Stoughton Branch Railroad, near the village of Canton.

The millions pairs of boots and shoes that are made in this country is truly wonderful. In Lynn alone, 12,000,000 pairs are made annually, which is but an item of the sum total. To supply the thousands of persons engaged in the manufacture of these indispensable articles of comfort and adornment, with tools and machinery, requires inventive genius a fertile brain aided with a complete manufacturing establishment for their production.

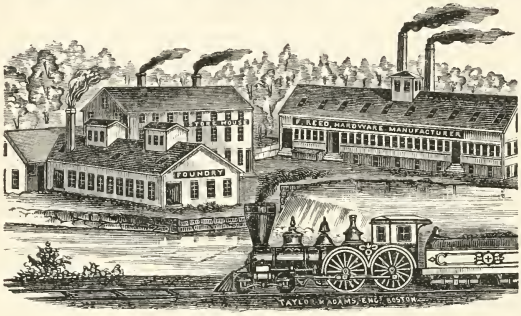
WITHIN a few rods of this depot is the manufactory of FRANKLIN REED, who has made a speciality of manufacturing shoe machinery and shoe tools since 1847. His buildings are three in number, the main one being 66x26, 2½ stories. He employs 40 persons. The works are located on a stream running from York Pond, with a fall of 8 and 16 feet (two powers). Four breast wheels and a 20 horse power engine supplies the power. Besides shoe machinery, &c., Mr. Reed makes an assortment of hardware, cutlery, &c. See engraving of establishment and advertisement. Post Office Address, Canton.

SPRINGFIELD, 62 miles from New Haven, 26 from Hartford, 98 from Boston, 54 from Worcester, 103 from Albany and 135 from New York, a city containing over 30,000 inhabitants, on the

FRANKLIN REED,

—— Manufacturer of ——

BRICK, PLASTERING TROWELS,



Corner, Garden AND POINTING TROWELS,

Shoe Knives Bread Knives, Brad Awls and Brad Awl Hafts, Pegging Awls and Pegging Awl Hafts.

— ALSO —

Snell's Patent Counter Machine, and Chopper, Rolling Mills and Splitting Machines, Stripping Machines,

And all Machines formerly made by S. A. W. PARKER, of Stoughton.

Also an assortment of

Agricultural Implements.

Also, all kinds of

SMALL MACHINE CASTINGS.

ALL ORDERS PROMPTLY EXECUTED.

Post Office Address, Canton, Mass.

Connecticut river, 76 miles from its mouth. Springfield is a great railway centre, it being the junction of the Western, Hartford, New Haven & Springfield, and Connecticut River Railroads. The city is built on an extensive plain, which, at this point extends for a number of miles along the river bank. A little less than one mile from the river and rising gradually from the city, is an elevation,—being parallel with the plain and running from it in an easterly direction many miles. The city was settled during the year 1635 by the name of Agawam, taking the name of Springfield in 1840. In 1645 the town was incorporated. In 1852 it was incorporated a city, having, at that time, about 12,000 inhabitants. Located as it is, in the centre of a fine farming country, with unequalled rail communications, and by navigation on the Connecticut river, gives this place a great many advantages over other places in this section of New England. The streets are broad, straight and running at right angles with each other. Main street, the principal business avenue, runs parallel with the Connecticut river, nearly north and south, is upwards of three miles in length and about 100 feet broad. The public buildings are all large, mostly constructed of brick or brown stone, and of a modern style of architecture, which, with the very fine private residences and general appearance of the city, justly entitle it to rank among the leading enterprising and rapidly growing cities of New England. The hotel accommodations are first class.

The first church built here, was the First Congregational, founded in 1637. There are at this time, 20 churches, 7 national banks and 3 savings. The insurance interest is represented by 3 home companies, life, fire and fire marine respectively. There are some very fine school houses here, and great care is taken to afford the scholar every advantage for acquiring a thorough education. The United States arsenal is delightfully situated on an elevated plain, the buildings are arranged with great taste around a level square of some 20 acres. On one of the buildings is a cupola from which an extensive and delightful view of the Connecticut river and the surrounding country is presented. This arsenal was founded in 1795, and has undergone much improvements and enlargements during the war; but the reduction of the force employed has of late been very great.

The following comparative statistics will show the vast increase in the business of the armory. In the month of April, 1861, there were 504 men employed. In April, 1862, there were 1912; April, 1863, 2635. The number of muskets fabricated in April, 1861, was 1202; in May, 2,000; in June, 3,000; in May, 1863, 25,000; April, 1864, 26,000. The destruction of some of the buildings by fire, July 2, 1864, reduced the production to 15,000 per month for six months, when it was increased to 25,000, till July 1st, 1865; since which time but few guns have been fabricated. The greatest number of men employed at any one time during the war, was 2,992; 828 men were employed May 1st, 1866, the entire force being engaged in repairing old guns. July 1, 1867, there were 1220 men engaged in repairing arms and altering Springfield muskets of the pattern of 1864 into breech-loaders. During the six months ending July 1, 1867, 25,080 of these muskets were remodeled.

Hampden Park inaugurated Sept. 29, 1857, is an institution that Springfield people take a great interest in and are justly proud of. It was purchased and improved by the Hampden County Agricultural Society at a cost of $31,600 for an exhibition ground, "the finest and most convenient location the Society could have fixed upon." These grounds, sixty acres in extent, enclosed on the river side by a costly levee, on the other side by a substantial fence, contain a splendid barn, with stalls for cattle and horses and exten-

sive sheds in addition devoted to a like purpose, a mile and also a half mile track graded and kept in good condition, a range of seats three hundred feet long and a judges' stand, tasteful in appearance and permanent in construction. Here have been held the far famed Springfield Horse Shows and the Annual Cattle Shows of the County Society. Its use as a public park is strikingly appropriate for it was the first lot of land granted by the early settlers within the first month after their arrival in 1636. The highest rise of water in Connecticut river is as follows: 1801, 21 feet 6 inches; 1843, April 18th, 20 feet 8 inches; 1854, May 1st, 22 feet 4 inches; 1856, Aug. 21st, 18 feet 9 inches, (Camp Thompson inundated); 1859, March 20th, 20 feet 6 inches, 1862, April 20, 22 feet 2 inches, (Hampden Park flooded); 1865, March 18th, 18 feet and 10 inches.

The Springfield Museum was originated in 1860 with the Library Association, and two rooms were assigned to it in the City Hall, which have been fitted up with appropriate shelves and cases, and now contain about 1,500 species and upwards of 3,600 specimens of shells, classified by Dr. George A. Otis, recently Surgeon of the 27th Massachusetts Regiment: also 7,407 specimens of insects; 481 specimens of stuffed birds; 104 stuffed quadrupeds, including two enormous wild cats, killed in this country; 115 species of fish and reptiles; small cabinets of coral and crustacea; an extensive mineralogical cabinet; a large and very curious collection of fossils; numerous Indian and foreign antiquities, and several flags and various other trophies captured from the Southern rebels by Massachusetts troops.

Additions are frequently made by the generosity of citizens, and the Museum is in quite a flourishing state for so young an institution.

Springfield Cemetery Association grounds cover an extent of nearly forty acres, and from their opening in June, 1841, to January, 1867, 6,290 interments have been made in them, 210 of that number being from January, 1866, to January, 1867. The whole amount received for lots from May, 1866, to May, 1867, was $3,200.79.

Principal Public Halls in Springfield—City Hall, having seats for 2,700 persons. Music Hall, corner of Main and Pynchon streets, seats 1,200 persons. Union Hall, adjacent to the Union House, South Main street; Rice's Hall, State street, Massasoit Hall, in Fallon's Block, and Lincoln Hall, in Brown & Pinney's Block, near the Water Shops, are all commodious and pleasant places for assemblies, meetings, etc.

The City Hall, fronting Court Square, erected at an expense of $100,000, ranks among the finest buildings in New England. It has an audience room capable of holding 3,000 persons, and accommodations for all city officers, Police Court, City Library and City Museum.

The population of Springfield in 1865 was 22,038; estimated this year (1869,) 30,000. The valuation of real estate in 1868 was $12,758,420; personal property $5,110,810; total $17,867,230. The combined capital of the banks $2,200,000.

MANUFACTURERS.

Hawkins, Herthel & Burrall, bridge builders. The members of this firm have had the experience which but few have had in this business. Mr. Hawkins has had years experience, having entered the office of Stone & Harris in 1853. The latter being the builders of the celebrated Howe Truss Bridge. Mr. Stone is now a millionaire and a leading railroad man of Cleveland, Ohio. Mr. Harris, who has for several years past been a partner of Mr. Hawkins under the firm name of Harris & Hawkins, has also retired from active business, and is now one of the leading railroad men of New England, having amassed a large fortune. His successor, Mr. Hawkins, who is a young man, has associated with him George P. Herthel, one of the most highly educated of American engineers and who has gained much information by several years study in Germany, of the construction of iron bridges, and has had much practical experience in this country. He is the inventor of Herthel's Patent Parabolic Iron Bridge and Herthel's Patent Iron Turn Table. Mr. Herthel formerly resided in St. Louis, but has recently come east to take an active part with the company in the manufacture of iron bridges, now becoming so popular. The other partner, Mr. W. H Burrall, is also an experienced and educated engineer, being a graduate of the Troy Polytechnic Institute and formerly Assistant Engineer on the Illinois Central Railroad, and afterwards Chief Engineer of Cairo & Fulton Railroad, and now a partner in the above business as Mechanical Engineer and Superintendent. This company with its varied experience, are every way qualified to carry on the business they have assumed. They are building the Howe Truss Bridge in wood, and the Herthel Iron Bridge for railroads and highways.

Roofs and turntables are among the list of the articles which they manufacture; and they have a factory for the making of bolts, &c., for their work, which is connected with the iron foundry owned by Mr. Hawkins, on the Boston & Albany Railroad, just east of passenger station. This firm having all the prestige of their successful predecessors, and their experience in the iron bridge building, soon to supersede all other kinds, leaves a great field open before them, in which there are many advantages that will carry them on to increasing success.

Lyman King, manufactures fancy cassimeres, making a specialty of double and twist. He employs 50 persons, runs 3 sets cards, 1,600 spindles; consumes 100,000 pounds stock annually, turning out 100,000 yards; power supplied by water, 12 feet fall.

George Curtis & Co., brass finishers and general machinists. The business was established in 1866, by George Curtis and E. Bigelow. They occupy the first floor in a brick building on Market street, which is 45x60 feet. They also manufacture initial presses for various kinds of work. They employ, on an average, about eight hands. The steam power is derived from an engine run by other parties.

E. Bigelow, manufacturer of marble soda fountains. The metal work is done by George Curtis & Co. The marble work is made in New York. During the busy season some 25 hands are employed. The amount of business per year is about $40,000. Mr. Bigelow claims to be the first maker of marble soda and syrup fountains, having put the first in market in 1860. These fountains are very attractive in appearance, being much better than the silver ones so long used.

Avery & Co., inventors and manufacturers of the peerless reflecting gas burner, also of the self regulating patent valve burner. The business was established in 1866, by Avery & Co. They employ six hands. The steam power is obtained from an engine in the next building. They also manufacture the general variety of gas burners.

Robert G. Shumway, manufacturer of fine gold chains. Mr. Shumway commenced the manufacture of chains in the year 1850, and now occupies one floor in Shumway's Block. It is 55x25 feet with an L about 15 feet square. The building is constructed of brick. He employs 15 hands. There is one 10 horse power engine built by Roche Bros., and one tubular boiler in the manufactory. He commands a capital of $10,000.

E. S. Stacy & Co., tool makers and machinists. They manufacture model and experimental machinery and screws and punches of various kinds. E. S. Stacy & Co. commenced the present business in 1866. They occupy about 600 square feet in Shumway's Block, Harrison Avenue.

A. D. BRIGGS & COMPANY,

CIVIL AND MECHANICAL ENGINEERS.

Builders of

TRUESDELL'S PATENT TRUSS BRIDGE,

And other

Iron Bridges, Roofs and Turn Tables. Also Howe's Patent Truss Bridge and Roof,

And other

Timber Bridges and Turn-Tables.

Particular attention given to repairing all kinds of Bridges. All work warranted to give satisfaction. Plans, Estimates and Specifications, upon application.

No. 7. Fort Block, Main Street, Springfield, Mass.

A. D. BRIGGS. J. R. SMITH.

Eight hands are employed at the present time. The steam power is derived from a 15 horse power engine that runs machinery in other parts of the building.

CHENEY BIGELOW, manufacturer of all kinds of wire cloth, foundry riddles, hat racks, &c. The business was established by C. Bigelow in 1842. The main building used for manufacturing is 50x30 feet, 2 stories high, constructed of brick. The second building is 1 story high, built of brick and is 40 x 30 feet. He employs 8 hands; has 16 looms in operation.

SPRINGFIELD ENVELOPE CO. manufacture all styles of envelopes. The business was established by the Sprinfield Envelope Co. in 1867. They occupy 1 story in "Shumway Block," 50x25 feet, and employ 15 hands. The steam power is derived from au engine of 15 horse power, which is used by other companies in the same building.

GEORGE W. TAPLEY, manufacturer of all kinds of enamelled and collar paper or linen finish; also, Bristol and Photograph Board. Brigham & Tapley commenced business in 1866, and during 1867 Mr. Brigham retired from the firm, the business was then carried on by Mr. Tapley, who now has his factory in Wesson's new brick block, corner Park and William street. The size of the building is 88x30 feet using part of the 1st floor and all of the 3d and 4th floors. The average number of employees is about 25. There is a capacity for turning out about one ton per day of linen finished paper used for collars and cuffs. The power is furnished by an engine owned by Martin Wesson.

D. Schoonmaker, gold and silver plater, manufactures to order, plates, rings, door numbers and all kinds of gold and silver plating. The shop is on Taylor street in a two story wooden building, and occupies one story 30x55 feet. He has in his employ about 7 persons. The steam power is derived from an engine in an adjoining building.

NONPAREIL PAPER COLLAR CO., manufacturers of the celbrated Bemis patent shape collar and cuffs. This successful company commenced business in 1864, having been first put in operation by S. A. Bemis, who is still a partner, associating with him in business J. W. Goodrich. The factory is on Hillman street, in a fine brick block, three stories high, and about 135x35 feet. They occupy about one-half of the whole building and employ from 40 to 50 hands. There are 13 various kinds of machines used; 4 having a capacity of producing 125,000 collars per day. The amount of stock consumed at the present time is about 1,000 lbs. per day. Steam power is furnished by an engine running, which also runs machinery for other companies in this building. This company are making a very fine class of goods and the sales are rapidly increasing.

SPRINGFIELD CORK MANUFACTURING CO. make Harris's machine cut corks. This company commenced business in the spring of 1866, having a capital of $50,000. The building is 35x45 feet, and three stories in height. The factory is in the same building with Nonpareil Collar Co., and the power is furnished by the same engine. The average number of employees is about 30. There are 15 cutting machines having a capacity of 125 gross each per day. The amount made per month, is about 10,000 gross, or about 100,000 per year. This company is the exclusive owner of Harris's machine for cutting corks.

AGAWAM FOUNDRY, Wright & Emerson, proprietors. Manufacturers of iron railing for cemetery lots and balconies. The business was established by Mr. Wright about 7 years ago. In a few years Mr. Emerson became a partner. The foundry is 38x38 feet, and attached to the foundry is the moulding room 38x75 feet, both buildings are built of brick and are one story high. In the rear of foundry is a pattern shop, a wooden building 20x16 ft., and 2 stories high. Employees average in number from 15 to 18. There is one furnace having a capacity of about one ton per day. A 17 horse power engine, built by Hoadley, of Lawrence, furnishes the motive power.

HALL & HUBBARD, manufacturers of patent metallic cartridges of all sizes, under Smith & Wesson's patent. This company was one of the first to engage in the manufacture of metallic cartridges, having been started by the firm of Smith & Wesson, in the year 1858, who are now engaged in the manufacture of the celebrated Smith & Wesson pistol, and after a while the company changed to Hall & Farmer, and then again, in May, 1866, the company changed to Smith, Hall & Buckland, and continued until May 1st, 1868, when the firm again changed to Hall & Hubbard, and has so continued. The factory is in the fine brick building owned and, in part, used by Martin Wesson, for the manufacture of carpet slippers. This company has a capital of $40,000, and with the long experience, (Mr. Hall having been in the business from its start,) and the valuable improvements made to facilitate the manufacture and to improve the quality, has given this company facilities for making an article whose merit is well known. They are now turning out the great number of 1,500,000 cartridges per month, varying in size from 22, which is used for the smallest pistol, to 58 caliber, used for the largest gun. They manufacture all the cartridges used by Smith & Wesson. A large part of the goods are shipped to foreign countries, especially the larger sizes. Principal agency, 252 Broadway, New York.

AMONG the few first class foundries whose appointments and everything connected therewith is unsurpassed, may be mentioned the foundry owned and run by R. F. HAWKINS.

HAWKINS, HERTHEL & BURRALL,

88 MAIN STREET, SPRINGFIELD, MASS.

BUILDERS OF

Iron and Timber Bridges, Roofs, Turn Tables, &c.

CIVIL AND MECHANICAL ENGINEERS.

R. F. HAWKINS, GEO. P. HERTHEL, JR,. W. H. BURRALL.

The main building is built of brick and is 50x125 feet, and one story high. There is also a moulding room, office and other outbuildings covering in all some 3,000 square feet, and having yard room of about half an acre. There is one McKenzie furnace which melts from 1,500 to 2,000 tons of iron per year. He has 50 employees. The neatness and order in which everything connected with this establishment is kept is pleasing to the visitor. The largest part of casting done in this foundry is for New Haven, Hartford, and Springfield, Connecticut River, and Boston and Albany Railroads; the castings for Hawkins, Herthel & Burrall, bridge builders; Howard's steam-heating apparatus, and also pump and custom castings to order. Attention is also given to pattern making. B. F. Quimby is Superintendent.

A. PEACE, manufacturer of fancy Jacquard skirts, &c., uses one story in the brick building corner of Emery and Fulton streets, 25x81 feet. There are six Jacquard looms running, requiring 12 employees. About 75 skirts are made per day. Steam power is furnished by an engine owned by William H. King.

WILLIAM H. KING, manufacturer of the Massasoit Balmoral skirt. Business was first started in 1862 at Mill river, in the southern part of Springfield and removed to his present location in 1866. The factory, corner of Emery and Fulton streets, is a 4 story brick building 25x81 feet, with an L 24x22 feet, also brick. There are 12 looms, 1 jack, 180 spindles, 1 set of cards, manufacturing 100 skirts daily, using about 60 lbs. of stock, and furnishing work for from 12 to 15 employees. The motive power is derived from a fine engine of 15 horse power, built by Pitkin Bros., Hartford. Agents, Billings, Chaffee & Co., Boston.

ONE of the largest confectionery manufacturers in the New England States, is that of RIBBE BROTHERS, who manufacture all the nicest kinds of candy. This company was established about 25 years ago, and are now located in a large brick building corner Main street and Harrison Avenue. It is four stories high 60x100 feet, being the dimensions of 1st floor which is used for packing and salesroom, and half of each of the remaining 3 stories being 50 x60 feet. The amount of candy made in this establishment, alone, requires from 1 to 1½ tons of sugar per day. One 14 horse power engine built by Roche Bros., Springfield, and 1 tubular boiler furnishes the motive power. Names of company: Geo. A. and Horace Ribbe, Ed. McElwain and S. D. Porter.

CAMPDEN CARD CO., manufacturers of machine card clothing of all descriptions for woolen and cotton machinery. This company was established in 1860, and are now employing about 10 hands, running 40 machines and averaging some 200 hides per month. The motive power is derived from one 12 horse power engine and one locomotive boiler.

To be placed beside New Haven's largest carriage manufactory, is the manufactory of H. W. WARNER, who has been instrumental in introducing a nice quality and style of baby carriages. He claims to turn out from 3 to 4 times the number of these little carriages than is made and sold by any two of the largest carriage manufactories doing business, he having a stock on hand at the present time, of full 3,000, and is constantly adding to that large number. They are made in every style to suit all classes, and costing from $150, (these being gold mounted, and finished throughout to correspond,) down to the lowest price for which one can be made. Mr. Warner commenced to make this style of carriage, in 1850, while in Greenfield; and in June, 1868, removed to Springfield, and is now located in the brick building on Main street, being three stories high, and covering over 10,500 feet, and gives employment to 30 hands. The preparing and getting out parts of stock, being done at Elm Grove, Mass., and giving employment to many more.

DAVID SMITH & CO., manufacturers of light and heavy carriages. Mr. Smith commenced this business in the year 1827, and undoubtedly has carried on a carriage manufactory as a separate business more years than any other now doing business in this branch, in western Massachusetts or Connecticut, unless it be with one exception, in New Haven. The factory is on Park street, and covers about 8,000 square feet of flooring. At present there are but 20 employees. The sale of new work amounts to upwards of $26,000 per year. This company has done business 42 years, and during the great financial panics in these many years that have swept from the list or temporarily suspended from business a large number of companies, they have continued business all the while, not increasing so quickly as some have done for the time, but have kept a steady onward course giving employment to their help and a character to the company that has been of great benefit.

A. D. BRIGGS & CO. are among the leading civil and mechanical engineers in the United States. Their reputation as builders of bridges is quite extended. The number of bridges which they have now in course of erection in different parts of the country speaks well for their success in this line of business. The Truesdell patent and Howe's patent truss bridges are built by them with much success.

SPRINGFIELD SILVER PLATE CO. was incorporated Jan. 1, 1868, having a capital of $50,000, and are engaged in the manufacture of silver plated and Britannia ware. The company occupy 1½ stories in the large brick building, corner of Killman and Dwight streets, being about 350 feet by 35 ft. The average number of employees is 40. Steam power is

furnished by a large engine, used for driving the machinery in this and the adjoining building. C. H. Beebe, Treasurer.

B. B. Hill, manufacturer of revolving dial cancelling stamps. Mr. Hill has the honor of first introducing the style of stamp which has perfectly revolutionized the manufacture and use of the old style of type-stamps. An indicator is arranged so that the operator may instantly bring into position any date required, and no chance of mistake. The business was established by Mr. Hill during the year 1864. He now occupies part of two floors in a brick building, on Liberty street, having upwards of 2,200 square feet.

He uses 7 lathes, 1 punch press, 1 upright drill, 1 drop press, 1 tool forge, &c. Employs about 12 hands. Steam power is furnished by an engine in adjoining building. In addition to above stamps, there are made all kinds of seal presses. Also, a new style of branding iron.

"Crescent Mills," Chapin & Gould, proprietors, manufacture writing paper. The business was established in 1858. The factory is 40x250 feet. They employ 70 hands; consume 2,800 tons of stock, yearly. The power is furnished by engines, 5 of 250 horse power, and one of 650 horse power. The mill is situated 1½ miles from Huntington, Mass.

Roche Brothers, machinists and manufacturers of and dealers in steam engines, boilers, pumps and sheet iron works; gas steam pipes and fittings. This company commenced business in 1863. Their main building, built of brick, is 40x100 feet, 2 stories; pattern house, 2 stories 60x 30 feet, built of wood. In the machine shop are 8 lathes, 2 bolt machines, 1 planer and 2 drill presses, and other tools usually found in such an establishment. Employees number 30. This company make a specialty of building the Tyler steam engine. Business amounts to about $50,000 per annum. Steam power is furnished from an engine in building adjoining.

N. W. Talcott, manufacturer of car axles connection rods and wrought iron shafting. Business was established in the year 1849 by Messrs. Wright & Co., but for the past 18 years, Mr. Talcott has carried on the business. The forging building now used which is built of brick is 100x60 feet, 1 story. There are employed about 13 hands, who turn out some 2½ tons of finished work per day. An engine of 20 horse power built in Manchester, N. H., furnishes the requisite power. The steam-hammer used for forging, weighs 2,000 lbs., and is run by 1 flue boiler 28x30 feet in diameter. The engine is also generally run by this boiler, although there is a locomotive boiler sometimes used. The boiler is fired by forge fires thus saving much in coal.

Newell Bros. Manufacturing Co., manufacturers of all kinds of covered buttons, lasting, linen, upholstery, velvet, &c.; also ivory buttons. J. C. Dickinson, sole Agent. The business was started by D. Chandler & Co., who carried it on some 8 years, when Mr. Chandler retired and the business was continued under the name of Newell Brothers. Three buildings are used as follows: Main buildings 100x30 feet, with an L 20x50 feet, 1 story; the main building being 3 stories, and both built of brick. The dry house, which is used for preparing stock, is built of wood, being about 30 ft. square, 1 story. A fire-proof brick building, used for keeping tools and machines, 15 x 30 feet. Average number of employees is about 125. They are running from 75 to 80 of the different kinds of button machines. The engine is a new kind of rotary engine, which occupies but 6 feet square space, and is rated at 30 horse power, built by Lymau, of Springfield. The boiler is one of Roche Bros.'s tubular boilers, of Springfield. The Newell Bros. are making a class of goods for the best trade.

S. S. Purinton & Co., manufacturers of brown earthen ware. S. S. P. & Co, commenced business in January, 1868, and are occupying a one story brick building 24x59 ft. with an ell 26x29 feet, one story of which is used for kiln room. Four horse power is used from engine near by. Principal business at present consists of making flower pots.

Grimes & Ellison, steam boiler makers. Bullens & Grimes established the business in 1866, but lately carried on by Grimes & Ellison. The building is a 2 story wooden building 36x30 feet with L 30 feet square. The boiler used is a tubular one, made by themselves, and set by Nelson's improved method. Boiler room in brick building separate from others. Office and engine room, in addition to the main building, 20x30 feet. A new engine of 20 horse power, built by Benham, of Hartford, furnished motive power. The first floor is used for boiler works and second floor for machine shop. Average number of employees 12. Steam and gas piping is also carried on. This company are also Agents for Blake's Patent Steam Pumps and W. W. Tupper's Patent Grate; also, Smith's Patent Grate, and the Elliptic Tube scraper and cleaner for boilers and other tubes.

E. Trask's railroad casting and general jobbing foundry. Mr. Trask established the present business in 1836, and is now using three buildings as follows: foundry 50x60 feet, built of brick; pattern house two stories 60x70 feet, built of wood; building for flasks 30x45 feet, built of wood. There is also a coal shed 20x30 feet. The average number of employees is 18 to 20. One of Blanchard, Kimball & Co's., 12 horse power engines, and one locomotive boiler made by Lowell Machine Co. furnishes the necessary power.

E. Stebbins Manufacturing Co. manufacture Stebbins' compression water cocks, oil and molasses gates, and brass castings. Especial attention is given to the manufacture of castings for fine work; also, railroad castings. The business was established in 1852, by Erastus Stebbins. They occupy one 3 story building 50x30 feet, with an ell 30x30 feet. They employ 25 hands, and consume per year, 126,000 lbs. spelter, tin, &c. There are 6 machines used. The amount of business done in 1868, was $65,000.

Springfield Gas Machine Co., manufacturers of portable gas works for dwellings, public buildings, mills, factories, &c., were established in 1866, with a capital of $125,000. They occupy a 3 story building 40x90 feet, and employ 30 men.

Kingsley & Co., successors to M. Wesson, manufacturers of the American carpet slipper. No information received.

Smith & Wesson. This firm established their business in 1858. They occupy a main building, 4 stories in height, 150 x 35 feet; a forge shop 40 x 50 feet; engine house and boiler room 25 x 40 feet. Employ 275 hands, and produce 50,000 revolvers per annum, valued at $600,000. They use 212 machines, such as drilling machines, lathes, &c. Consume 50 tons iron and steel per year. Their motive power is furnished by a 50 horse power engine, made by the Corliss Steam Engine Co., Providence, R. I. Since the Paris Exposition, where they received a silver medal for goods there exhibited, they have had a large demand for their goods, from every country in Europe, and have also sold largely to China and Japan. In fact their productions are now seut to nearly every nation in the world; one-half of their entire manufacture being exported to foreign countries.

These pistols are light, have great force, are sure fire, shoot accurately, can be left loaded any length of time without injury, are not liable to get out of order, and are safe to carry.

Henry King & Son. The business was established in 1852 by Henry King, and in 1864, Martius H. King was made a partner under the style of Henry King & Son. They employ from 50 to 60 men, and work 20 horses, 2 yoke of oxen and one 40 horse power engine. They make daily 50,000 common and 20,000 pressed brick during the season

Medal Bed

THE BEST EVER OFFERED.

The United States Spring Bed Co., of Springfield, Mass., offer for sale their unrivalled SPRING BED, which has given a satisfaction wherever used, superior to that of any bed which has ever been offered. It is made entirely of **Iron;** is perfectly **noiseless;** cannot get out of order; will last for generations without expense of any kind; affords no possible harbor for vermin; is light, clean and easily handled; requires but one thin mattress; and is most delightfully elastic **all over,** adjusting itself perfectly to the form of the sleeper, so that the whole body is supported **equally;** thus entirely avoiding any feeling of fatigue to prominent parts of the person, which is always felt in ordinary or *Slat Spring* Beds.

Our beds are pronounced by the best judges in the country, who have had them in use in hotels and private houses, as not only the **best,** but the **cheapest** beds ever offered, though there are others sold at a less price. At the Fair of the Mechanics and Art Institute of New Hampshire, in October, 1868, it was subjected to severer tests than were ever borne by any other bed, without the slightest injury, and it was awarded their highest premium of a Silver Medal.

Price lists furnished on application.

SPRINGFIELD, MASS., June, 1869.

J. F. PECK, Agent.

between April 15th and October 15th; which sell at an aggregate of $800. They use about 1,500 cords of wood and 100 tons of coal annually. They use the Continental machine for making their fine pressed brick and the Vervalen for their common brick. Their works extend over and embrace eighteen acres of land with six buildings. Brick sent to any part of Western Massachusetts. No agents employed. Particular attention given to making bevel brick of any shape or size for windows, corners, chimneys, &c.

THE UNITED STATES SPRING BED CO. was established in June, 1868, for the manufacture of spiral spring beds upon an entirely new and novel principle, insuring the greatest elasticity and permanence, which was patented in July, 1867. The company are now working upon a capital of $20,000, and employ 10 hands, who turn out at present 75 beds per week, consuming weekly one ton hoop iron and a half ton of spring wire. Their present location is a floor of about 25 x 100 feet, but their business is increasing, and an enlargement of facilities will soon be necessary. The company own the right for the New England States, and the bed meets with the greatest favor wherever introduced. Mr. J. F. Peck is the agent for the company.

BEMIS & CALL, Hardware & Tool Company. Mr. Amos Call, President, Mr. W. Chaplin Bemis, Treasurer. This business was established in 1830, by Mr. Stephen C. Bemis, at Willimansett, Mass., a parish then in Springfield, and incorporated June, 1855. Stephen C. Bemis is the father of the hardware manufacturing in the Connecticut Valley. Some thirty years ago he commenced the production of hardware in the village of Willimansett, now the town of Chicopee. American manufactures were then in their infancy; the demand for home made goods was then limited. Thousands of dollars were sacrificed on experimental enterprises, but Mr. Bemis had energy and tact, and surmounted all obstacles, and built up a large business by continual perseverance and energy. He gained an honest reputation, and the Bemis Trade Mark became the brand of an immensely popular line of hardware goods, of material and style of finish equal to the world renown Sheffield goods. After carrying on the manufactory successfully for a long time in his own name, Mr. Bemis, 13 years ago, resigned its active management to his son, Mr. W. Chaplin Bemis, and Mr. Amos Call, (for a long time employed in the manufactory,) who, under the name of Bemis & Call, Hardware & Tool Company, have extended their borders and increased their business. One at the present time cannot go into any hardware store in the United States or British Provinces without finding Bemis & Call goods upon their shelves.

The buildings occupied are as follows:—Main shop, two stories high, 60x45 feet; blacksmiths' shop, one story 42x 31 feet, with out buildings, annealing and store houses, &c. They furnish employment for between 45 and 50 hands, and use the following machines, viz.: 2 trip hammers, 3 drops, 6 presses, or punching machines; 5 engine, 6 hand and 5 upright lathes; 7 drilling machines, 1 screw cutting machine, 1 double headed lathe, 8 polishing frames and fixtures, 7 forges, 3 grindstones, 1 planer, 1 tube machine, circular saws, turning lathes for wood, &c. &c. They manufacture in great variety, all kinds of carpenters' and machinists' tools. The manufacturing department is under the general superintendence of Mr. Amos Call; and the financial department, chiefly, under the control of Mr. W. Chaplin Bemis. The office of the company is in Bemis block, and their manufactory east of Main street, by the Boston and Albany Railroad track.

STATE LINE, junction of the Housatonic and Western Railroad, 38 miles from Albany, 162 from Boston, and 100 from Bridgeport. The station is situated on the dividing line of New York and Massachusetts and contains about 60 inhabitants.

STEPHEN'S CROSSING, a country station on the Lawrence Branch.

STERLING CENTRE, 14 miles from Worcester and 12 from Fitchburg, quite a manufacturing village on the Worcester and Fitchburg Railroad.

STERLING JUNCTION, 34 miles from Nashua, and 12 from Worcester, on the Worcester & Nashua Railroad. The Fitchburg & Worcester Railroad branches off here for Fitchburg.

STILL RIVER, 23 miles from Nashua and Worcester, a country station on the Worcester and Nashua Railroad.

STOCKBRIDGE, 93 miles from Bridgeport and 13 from Pittsfield, a station and town on the Housatonic Railroad in Berkshire County. This is a fine farming town on both sides of the Housatonic river. The soil is adapted to all kinds of culture, much of it alluvial meadow, the uplands producing excellent feed for cattle. Here is an excellent hydraulic power near the village, the latter being situated on an extended plain and surrounded by delightful scenery.

STONEHAM, 8 miles from Boston, and 19 from Lawrence. A village and town on the Boston and Maine Railroad, at the terminus of the Stoneham Branch Railroad from East Woburn. This is a small town, rocky and uneven. Spot Pond a beautiful sheet of soft and pure water lies in this town; it covers an area of 283 acres, and is 143 feet above high water mark, at Boston.

The famous Stoneham shoe-benches, which are used in all sections of the country, are made by B. F. Richardson, at the rate af 200 per year. He also makes cutting-blocks for shoe manufacturers. His factory is supplied with steam power, which drives a lathe, saw, etc. He has been established in the business 15 years.

All kinds of women's, misses' and children's pegged shoes are made by Duncklee & Danforth, who employ 40 hands and 11 sewing machines. They have facilities for turning out about $100,000 worth of goods per year, which are taken by the New England trade. A 6 horse power steam engine drives their machinery.

The firm of John Hill & Co. was established in 1833. They now employ 175 hands in the manufacture of women's, misses' and children's boots and shoes. In their factory, which is the largest in town, they use 30 sewing machines, with peggers, heelers, lasters, &c.. and have capacity to turn out 1,800 pairs per day. Power is supplied by a 15 horse engine, with 2 boilers of 20 horse power each. The factory has a front of 80 feet, and 2 wings, is 4 stories high, and contains 8 rooms, besides halls, dressing rooms, &c. The Boston office of the firm is at 86 Pearl street.

Wm. Tidd & Co., manufacturers of grain and split leather, in three wooden buildings located here. They are of the following descriptions: A currying shop 3½ stories 40x90 feet, a tanning and currying shop 2½ stories 40x80 feet, and a 2 story building 35x80 feet, used as a beam house and currying shop. This firm employ about 100 hands and turn out about 50,000 sides per year, worth about $400,000. Their machinery is run by an engine of 40 horse power, built by Wm. Adams & Co. of Boston, Mass., with 2 tubulars of 50 horse power each, built by Allen & Endicott of Cambridgeport, Mass. This business was established in 1840 by Wm. Tidd, Jr. Besides the above mentioned buildings, there are a number of smaller ones containing bark mill, engine and boiler house, leaching houses, store houses, tan houses, &c., the whole covering an area of about 2 acres. They have in use 25 pits.

Wm. H. Messer & Co. occupy a three story wooden building 24x40 feet, located on Emerson street, for the manufacture of ladies', misses' and children's boots and shoes. They commenced business in 1866; employ 25 hands, turn out about 36,000 pairs per year, and do a business of $50,000.

Drew & Buswell occupy one-half of a three story wooden building 35x55 feet, located on Franklin street, for the manufacture of ladies', misses' and children's boots and shoes. Employ 20 hands, and do a business of about $20,000 per year. Commenced business in 1866.

S. L. Crosby occupies one half of a three story wooden building 35x55 feet, located on Central street, for the manufacture of stiffenings, inner soles, and heels. He commenced business in 1867; employs 25 hands, and does a business of $10,000 per annum. The machinery is run by an engine of 5 horse power, built by Gifford & Houghton, of Fall River, Mass., with a tubular boiler of 10 horse power.

G. W. Trowbridge, occupies a 4 story wooden building 50x50 feet, located on Central street, for the manufacture of ladies', misses' and children's boots and shoes; employs about 50 hands, turns out about 75,000 pairs per year, worth $75,000. His machinery is run by an engine of 12 horse power, with a tubular boiler of 16 horse power, built by Allen & Endicott of Cambridgeport, Mass. Office and salesrooms No. 5 Pearl street, Boston, Mass.

Charles Emerson occupies a 2 story wooden building 28 x40 feet, located on Central street, for the manufacture of ladies', misses' and children's boots and shoes; employs 30 hands, turns out about 200 pairs per day, and does business amounting to about $50,000 per year. The business was established in 1844.

Hill & Rowe commenced the manufacture of boots and shoes in 1863. They occupy a 4 story wooden building 30 x103 feet, located on Main street, where they employ about 125 hands in the manufacture of ladies', misses' and children's pegged boots and shoes, of which they turn out about 180,000 pairs per year, worth about $250,000. Their steam power is supplied by an engine of 10 horse power, built by John C. Page of Stoneham, with one tubular boiler built by Allen & Endicott of Cambridgeport, Mass. Office and salesroom No. 71 Pearl street, Boston, Mass.

H. H. Mawhinney & Co. occupy a 4 story wooden building 30x75 feet, located on Main street, for the manufacture ladies', misses' and children's boots and shoes. They commenced business about 8 years ago; employ 60 hands and turn out about 125,000 pairs per year. Their machinery is run by an engine of 10 horse power, built by John C. Page of Stoneham, with a tubular boiler of 20 horse power, built by Allen & Endicott of Cambridgeport, Mass. Besides the goods manufactured at this establishment, this firm

receive and dispose of all the boots and shoes made at three other large factories in this town. Office and salesrooms No. 5 Pearl street, Boston, Mass.

WM. HURD occupies a 3 story wooden building 40x120 ft. located on Hancock street, where he employs 35 hands in the manufacture of morocco, turning out about 60,000 skins per year, worth about $125,000. The power is supplied by an engine of 12 horse power, built by Gifford & Houghton, of Fall River, Mass., with a tubular boiler of 20 horse power, built by Cook, Rymes & Co., of Charlestown, Mass. This business was established in 1849. Office No. 88 Pearl street, Boston, Mass.

GEORGE L. W. DIKE & CO. occupy 3 floors 24 x 48 feet, located corner Franklin and Central streets, for the manufacture of ladies', misses, and children's boots and shoes; employ about 40 hands, turn out about 100,000 pairs per year, and do business to the amount of $125,000. Their power is supplied by one of Roper's patent caloric engines. Office and salesrooms No. 40 Pearl street, Boston, Mass.

J. G. ROUNDS & Co. occupy a 4 story building 72 x 34, for the manufacture of women's, misses' and children's pegged boots and balmorals; employ from 80 to 100 hands, turn out about 12,000 pairs per month, and do a business of about $20,000 per annum. They use steam power for driving their peggers, stitching and heeling machines, sole cutters, rollers and other machinery.

STONY BROOK, 12 miles from Boston and 38 from Fitchburg, a station in the town of Waltham on the Boston & Fitchburg Railroad and on Stony Brook Creek.

WILLIAM G. SHATTUCK occupies a 3 story wooden building 40x30 feet with an L 17x14 feet, 2 stories, where he employs 18 hands in the manufacture of school furniture and settees. The business was established in 1836. His machinery is driven by a Cushman Iron Water Wheel, 9 horse power, built at Hartford, Conn. His sales room is at 108 Fulton street, Boston, Mass.

STOUGHTON, 18 miles from Boston, and 4 miles from Canton, at which place a branch from the Providence and Boston Railroad leaves the main track for this village. A place containing 4 churches, and 2,500 inhabitants. This village is one mile west of a depot by the same name on the Old Colony and Newport Railroad. The inhabitants are mostly engaged in the manufacture of boots and shoes.

J. SWAN & Co., manufacturers of boots. This business was established here, in 1823, under the firm of Beals & Swan. In 1851, H. Jones and J. R. Gray associated themselves with Mr. Swan under the firm style of J. Swan & Co. This firm occupy two buildings, covering over 2,400 square feet of ground. Employ about 75 hands, turn out about 3,000 cases, and consume $90,000 worth of stock per year. Sample room, No. 36 Pearl street, Boston, Mass.

B. KINGSLEY, manufacturer of boots and shoes, Washington street. Mr. Kingsley commenced business here about the year 1850, employing 20 hands and occupies 1 building 2 stories, wood. Sales room No. 44 Hanover street, Boston.

DANIEL FRENCH, agent for E. G. & E. Wallace, Rochester, New Hampshire, occupies a building 40x25 feet, 3 stories with wing 20x45 feet, 3 stories, for the manufacture of men's and boys boots. He employs 30 persons in the shop beside others outside. Produces 3,000 cases yearly.

N. MORTON & Co. commenced here the manufacture of boots and shoes in 1854. They occupy a building 41x70 feet, 3 stories, employing 75 persons; produce 3,000 cases, and do a business of $125,000 yearly.

S. G. PETTEE occupies a building 40x35 feet, 2 stories, for the manufacture of calf boots. Employs 25 persons, and produces 50 pairs per day.

GUILD & UPHAM commenced the manufacture of calf boots in July, 1868. They occupy a building 60x35, three stories with L 60x35, 3 stories. Employ 30 persons, produce 72 pairs per day and do a business of $65,000 per annum.

SAMUEL SAVELS & SON commenced the manufacture of boots in 1863, being successors to Samuel Savels who established the business about 30 years ago. They employ 5 persons in their manufactory, doing a business of $35,000 per year.

E. C. MONK commenced the manufacture of boots in 1858. He occupies a building 25x30, 2 stories; employs 15 persons; produces 36 pairs per day and does a business of $40,000 per year.

JAMES HILL, Agent for F. Dane & Co., 90 Milk street, Boston, occupies a building 30x60, 2 stories, for the manufacture of men's calf boots. He employs 60 persons, produces 36,000 pairs per year, and does a business of $150,000.

E. DELANO & Co. commenced the manufacture of boots in 1864, occupy a shop 18x24, 2 stories; employ 15 persons; produces 56 pair per day, and do a business of $50,000 annually.

PARKER & WALES occupy a building 60x40, 2½ stories, for the manufacture of boots and shoes, commencing here in 1863; employ 40 persons; produce 100 pair per day, and do a business of $60,000 per annum.

J. F. ELLIS & Co. occupy a building 30x45, 2 stories, for the manufacture of boots, commencing here in 1865; employ 25 persons and produce 50 pair per day.

THE FIRM OF REYNOLDS & CRANE was established in 1858 by Reynolds & Monk. The goods manufactured are fine calf boots and shoes, and Congress boots for California, the Southern and Western States, and the New England trade. They are pegged, nailed and machine sewed. They occupy two buildings, one 28x30 feet, 2 stories in height, the other 14x32 feet, 1 story. The number of employees is 40, consuming $450 worth of stock per month, and producing $3,440 of goods in same time.

SUTTON, 34¾ miles from Providence and 8½ from Worcester, on the Providence and Worcester Railroad. A village of about 600 inhabitants in the town of Sutton, containing 2 churches and 1 manufactory. The post office here is called Wilkinsonville.

CHACE & CLARK, manufacturers of shuttles of all kinds. Their works were burned in the spring of 1868, and it is their intention to rebuild soon. They employ 10 persons.

THE SUTTON MANUFACTURING CO. was incorporated in 1836, with a capital of $60,000. H. N. Slater, Sen., President; H. N. Slater, Jr., Treasurer; Edward Mathewson, Superintendent. The mill was erected in 1823, located on the Blackstone river, a few rods from the depot, and can be distinctly seen from the cars. The building is about 124x36, five stories, built mostly of stone, with two wings 50x28 and 28x30, one story respectively. Two small wooden buildings on the opposite side of the river, are run in connection. They have 11,016 spindles, 232 looms, employ 140 persons, consume 7,000 lbs. of cotton, and produce 40,500 yards of

print cloths per week. The power is furnished by a French turbine 82 inch wheel, put in, in the fall of 1868; the fall here being 13 feet. A breast wheel runs the small mill opposite. Office in Providence, R. I.

SUTTON'S MILLS, a country station on the Lawrence Branch Railroad.

SWAN'S CROSSING, a country station on the Lawrence Branch Railroad.

SWAMPSCOT, 12 miles from Boston, a station on the Eastern Railroad.

TAUNTON, 35 miles from Boston and 11 from Mansfield, on the Old Colony and Newport Railroad and Taunton Branch, is situated in lat. 41° 54′ 11″ north; long. 71° 5′ 55″ west. The city was incorporated in 1864, and is well built and lighted with gas. In the centre of the city is "Taunton Green." Most of the retail business being done in this vicinity. A rapidly growing and enterprising city of 18,000 inhabitants (1869). Number of polls, 4,000; amount of taxable property, $10,600,000; rate of taxation, $13.50 per thousand. The manufacturing establishments are as follows:

MANUFACTURERS.

The Taunton Locomotive Manufacturing Co. was incorporated in 1847, with a capital of $50,000; since increased to $218,500. Samuel L. Crocker, President; Harrison Tweed, Agent and Treasurer; Parley I. Perrin, Superintendent. The works are located near the depot and comprise in all 20 buildings. The largest, being used as an erecting shop, 55x200, 1 story. 3 finishing shops, 40 x 88, 2 stories; 46x100, 2 stories; 35x73, 1 story, respectively. A blacksmith shop 68 x 120, 1 story; carpenter's shop, 40 x 100, 1 story; boiler shop 40x180, 1 story; iron foundry, 52x103, 1 story; pattern shop, 32x78, 2 stories; brass foundry 24x50, 1 story; office, 28 x 32, 2 stories, with smaller buildings attached. This is the second establishment in the country that was built expressly for the manufacture of locomotives. The first locomotive that ran west of the Mississippi was built here. They employ 300 men, and have built 450 locomotives since 1847.

The Taunton Iron Works was established in 1854, with a capital of $67,500. Enoch King, President, George M. Woodward, Clerk, Treasurer and Agent. The works are located at Weir Village, and are one of the largest and most complete establishments in New England. The works comprise 5 buildings with dimensions as follows, commencing with the largest: Moulding shop 60x200, mounting rooms 40x156, pipe mill 64x118, store house 40x65, dry house for sand 25x45, all 2 stories, situated on Taunton Great River, with a water front of about 70 feet. They employ 150 persons. A 60 horse power engine made by Fairbanks, supplies the power. The immense business done here can be inferred, when 2,000 tons of coal, 1,000 tons of pig and 800 tons of pipe iron are used annually. This company have perfected many valuable stoves for the market and have introduced the Iron Age, Emperor, Victory, Rival, Veteran, and Emeral Cooks. They also make B. W. Dunklee's Golden Eagle Furnace, also Beauty range, Carpenter's double oven range, Pratt & Wentworth's Garnet and Peerless Portable ranges, Walker's wood cook stove, &c., &c. To enumerate or particularize each kind and style our space will not admit, but to speak in general terms, this company have originated and perfected some of the most valuable inventions and rank foremost as successful rivals in the stove line. They do a business annually of $250,000.

Dean Cotton and Machine Co. was incorporated 1848. Capital $100,000. Nahum Stetson, President. They occupy 5 main buildings; most of them 3 stories, built of brick, for the manufacture of print cloths and cotton machinery. They run 4,500 spindles, 150 looms; consume 700 lbs. of cotton per day, and produce 4,000 yards of 28 inch 60 x 64 print cloths. The motive power is furnished by an 80 horse power engine, built by the Providence Steam Engine Co., and 2 Wareham and 1 breast wheel. The works are located on Taunton Mill river, the fall being 9 ft. This company do quite a business in manufacturing cotton machinery, although their specialty is the manufacture of cotton goods.

Hopewell Cotton Mills; Chas. Albro, proprietor, occupies a mill 169x41, two and three stories, with wing 41x100, three stories, built of stone, for the manufacture of 28 inch print cloths, 64 square. The original mill was built in 1818, situated on Canoe river, in the village of "Hopewell," on the outskirts of the city. They run 7,008 spindles, and 180 looms. In 1868 they consumed 278,559 lbs. of cotton and produced 1,630,098 yards print cloths and corset jeans. They employ 130 persons. Three Fall River wheels with power of 180 horse, furnish the motive power. A 120 horse power engine assists when needed, built by the Novelty Works, of this city. Mr. Albro, was superintendent here in 1845 and succeeded the Lothrop Manufacturing Co. in 1854. He owns 59 tenements in connection with the mill. The fall is 12½ feet. John Holland, Sup't.

The Foundry and Machine Company was incorporated November 2d, 1850. Capital, sixty thousand dollars. H. S. Fairbanks, Agent and Treasurer. The works occupy several large buildings, covering an area of 1½ acres of ground, located on Court street. They employ 75 persons, melt 4 tons of iron per day, manufacturing steam engines, lathes, planers, hydraulic machinery, machinists' tools, &c., &c., doing a business of $175,000 per year.

Among other establishments that make Taunton famous as a manufacturing city, is the works of L. M. Leonard, on Wales street, who commenced here in 1848 as successor to Lemuel Leonard, his father, who established the business in 1844. The main building, used as a foundry is 138x54 feet, 1 story with L 60x30 feet, the mounting room is 100x50 feet, 1 story with small buildings attached, too numerous to mention. Here are made every style and kind of cooking, office and parlor stoves; ranges, castings, hollow ware, &c.; among others perfected by Mr. Leonard, is the "Governor," "Monteveu," "Enterprise" cook stoves, Walker's portable range; also, his sub base parlor stove and the "Capitol," "Tropic," "Eagle," "Welcome" parlor stoves, that are widely known throughout the country. He employs in his works 40 persons; consumes about 900,000 lbs. of pig iron, 200,000 lbs. scrap iron and 600,000 lbs. of coal in one year. A 25 horse power Corliss engine supplies the power, (Fairbanks make.) This establishment has an extensive trade through the surrounding country, and a reputation second to none for producing reliable and valuable stoves.

S. S. Babbitt commenced the manufacture of machinery in 1864. He occupies a building 22x38 feet, 1 story. Employs 12 persons, located at 33 Cohannet street, near the Railroad. His machinery consists of 10 lathes, 1 planer, 1 upright drill, 1 milling machine, built by the Pœnix Iron Works, of Hartford. A 12 horse power Corliss engine supplies the power.

L. M. LEONARD,

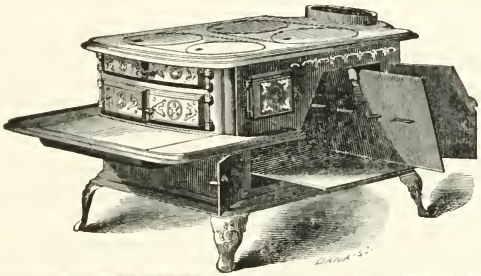
Manufacturer of

Parlor, Office & Cooking Stoves,

RANGES, AIR-TIGHT CASTINGS, HOLLOW-WARE, &C., &C.,

Wales Street, near the Depot, Taunton, Mass.

This Cut Illustrates the PATENT OVEN with Movable Plates.



S. Perkins & Co. commenced the manufacture of stoves, plows and castings in 1854, the main building is 100x50, a foundry, another 35x50, wood, and one 50x25, 1 story. They employ 12 persons, melt 1,500 pounds of iron daily, and do a business of $20,000 per year.

M. M. Rhodes commenced the manufacture of hoopskirt trimmings, saddle and lining nails, &c., &c., in 1859. He now occupies a building on Cohannet street, 100x40, two stories; employs 45 persons; consuming 1,200 pounds of sheet iron and 500 pounds of tacks daily.

Joseph Webster occupies a building on Court street, for the manufacture of files. The building is 30x20 with L 15 x20, 1 story; employing 12 persons and producing 6 gross per day of different styles and kinds.

Hill Bros., (Henry, Thomas and Benjamin) manufacture taper saw files, located at Hopewell, about one mile from the centre of the city.

D. A. Trefethen commenced the brass foundry business in 1848; the building is 44x32, two stories, built of brick, located on Westminster street. He produces 150 pounds of castings daily; employs 6 persons and does a business of $15,000 per annum.

Cushman & Coggeshall commenced the manufacture of leathered carpet tacks in 1865, in a building 30x60, one story. They employ 17 persons and produce 300 lbs. of tacks daily.

The Taunton Faucet Co. is located at 20 Washington street, commencing here in 1866; the building is 50x25, two stories, built of wood. Employ 7 persons and produce 50 faucets daily. A 30 horse power engine supplies the power.

E. W. Strange & Co. commenced the manufacture of box, board, stave, and shingle machines, blind makers' supplies, portable saw mills, nail keg and barrel heading machines, wrought iron tackle blocks, &c., in 1865. They occupy a building 100 x 60, 2 stories, wood; employing 17 persons. The business was established by Elias Strange in 1828, commencing with foot power. Mr. Strange has presented many inventions to the public;—a feed chain for engine lathes, machine for sawing hoop poles, &c., &c. A new patent machine for grinding circular saws has just been issued. He laid the plans for a dividing scale machine now extensively used. The works cover about 6,000 square feet of space and are supplied with heavy, ponderous machinery necessary for the production of their numerous inventions.

George L. Morris commenced the manufacture of blind hinges and fastenings in 1863. He occupies a room in a building on Franklin street, 20x30 feet, producing 20,000 set yearly.

D. A. Burt occupies a brick building 40x100 feet, 1 story, at 40 Weir street, for the manufacture of monuments, &c., &c. He employs 20 persons, and does a business amounting to $35,000 per annum. Mr. Burt has sent monuments to all of the New England States and as far south as North Carolina. J. A. Tilden, Superintendent.

Charles Husband occupies 2 wooden buildings on Cohannet street, for the manufacture of lining for railroad cars. They are 110 x 30, 2 stories, and 60 x 24, 2 stories. He employs 20 persons, and commenced business here in 1847.

The Taunton Soap & Oil Co. was incorporated in February, 1868. Capital $10,000. Edward Crossman, President; E. W. Crossman, Sec. and Agt.; W. Burgess, Treasurer. They occupy a building on Oak street, 80x40, 3 stories; employ 6 persons, and produce 12,000 lbs. of soap per week.

UNION FURNACE COMPANY,

Manufacturers of

COOKING, OFFICE AND PARLOR

STOVES,

Hollow Ware, &c.

Manufactory and Office, Third, near West Water Street, Weir Village, Taunton, Mass.

JOSEPH WRIGHT. FRANCIS LEEDS.

ELDRIDGE & Co. occupy a shop on the outskirts of the city, near Whittenton depot, for the manufacture of britannia and silver plated ware. The building is 60 x 24 feet, 1½ stories. They employ 10 persons and do a business of $10,000 per annum. A 6 horse power engine supplies the power. The business was established in 1849, by Eli Eldridge, who took his son in company about 1863.

TAUNTON CRUCIBLE CO. was incorporated 1865, with a capital of $35,000. Wm. H. Phillips, Agent; Thomas J. Lothrop, Treasurer. They occupy 1 building 80 x 40, 2 stories, manufacturing crucibles and stove polish.

TAUNTON OIL CLOTH CO. was incorporated in 1855; capital $25,000. Charles Robinson, President, Thompson Newbury, Agent and Treasurer, J. J. Whitmarsh, Superintendent. The main building is 60x90, 3 stories, brick. Employ 40 persons. The motive power is furnished by a 25 horse power Corliss engine, Fairbanks' make. This company produce 1,300 yards of enameled cloth daily.

WHERE do all the stoves go to! one would naturally exclaim if they should visit the works of the

UNION FURNACE CO., located on Third street, near West Water. They occupy a building 100 x 52, one story, used as a foundry, and a packing and mounting building 40 x 50, 2 stories. All the buildings are of brick. They employ 40 persons, melting 3½ tons of iron per day, and doing a business of $75,000 per year. The power is supplied by a 30 horse power engine, built by the Fuller Iron Works of Providence. They commenced the manufacture of stoves in 1864, and during that time have perfected and introduced to the public the Meteor, Dictator, Matchless, Kearsarge cook stoves; Matchless range; Dictator parlor stoves; all of which are a household word throughout the country, thousands of them having been sold. The success of this concern is owing to the proprietors being practical men, and knowing just what the public want, who have appreciated their goods and thus benefitted them. Besides stoves, they make a great variety of hollow ware, and a specialty of iron thresholds, that are having a great sale. Located near the water and the railroads, this company have facilities for shipping their wares to any point and in any quantity.

THE EAGLE COTTON CO. was incorporated in 1860, with a capital of $90,000. W. Rouse, Superintendent. The mill is 150x63, 4 stories, brick, with wing 38x48, two stories, brick. They run 11,500 mule spindles, 236 looms; employ 150 persons, consume 80 bales of cotton per month and produce 200,000 yards of 28 inch print cloths 64 square. A 125 horse power Corliss engine supplies the power, with six 30 inch cylinder boilers 32 feet long. The mill is situated on Wales street, in the south part of the city.

W. R. POTTER, 35 Cohannet street, machinist and iron founder, sewing machine tables, machinists and jewelers tools, fan blowers, &c. This business was established by Bartlett & Potter, about 1854. He occupies a main building 30x50, 2 stories, wood, another 25x70; 1 story with small building attached. He employs 30 persons. A 15 horse power engine made by the proprietor, supplies the power for the establishment.

THE PRESBREY STOVE LINING CO. was incorporated May 1st, 1866, with a capital of $400,000; E. D. Tisdale, President; Wm. B. Presbrey, Agent and Treasurer. The works are located on Bow street, the main building is 600x40, one story. They employ 50 persons and produce 10,000 set of stove linings per month, and 500,000 fire brick per year. The power is supplied by a 20 horse power engine. The business was established by the treasurer in 1843, who conducted it under his own name till the present company was formed. In 1868 they purchased the fire brick business of Thomas & Wilson.

THE PORTER BRITANNIA AND PLATE CO. was incorporated in 1859; capital $25,000. Oliver Ames, President; G. T. Atwood, Agent and Treasurer. The works are located on Winthrop street; the main building is 40x70, four stories; another 30x60, three stories; two wings, 30x24 each, four stories. They employ 100 persons. The power is supplied by a 30 horse power engine.

THE PHŒNIX MANUFACTURING CO. was originally established in 1844, for the purpose of making black lead crucibles and stove polish. The original proprietors were Messrs. Atwood & Vickery. At this time there was but one other concern of the kind in the country. The business was carried on by this firm about seven years, when a new company was organized and incorporated with a capital of $30,000. The works were then removed from their first locality to the Weir Village, and much enlarged and a steam power grist mill with a run of 4 stones was added to the same. The engine is of 60 horse power, made by the Corliss Steam Engine Company, Providence, R. I. The capacity for grinding meal is 1,000 bushels per day. The regular business has risen from a few thousand dollars per year to an average of about $100,000. The country is now supplied entirely from home production, whereas formerly we were dependent upon Germany for our whole consumption. The buildings occupied by the company cover an area of about an acre of ground. The number of employees is 24. The agents are Messrs. Patterson Brothers, New York, C. L. Rice & Co., Chicago, N. & G. Tarlor & Co., Philadelphia.

ANTHONY & CUSHMAN commenced the manufacture of Sweedish and Russia plate iron, in 1864, as successors to Marvel & Cushman, who established the business.

J. R. WILLIAMS,

MANUFACTURER OF

FIRE BRICK,

FOR IRON, COPPER, AND GAS MANUFACTURERS,

South End of West Water Street, Weir Village,

TAUNTON.

LOCOMOTIVE BRICK, BAKERS' OVEN TILE, AND CYLINDER LININGS,

CONSTANTLY ON HAND.

☞Orders for Fire Brick, Stove Linings, Tiles, &c., directed as above, will be promptly attended to.☜

A SHARE OF PUBLIC PATRONAGE SOLICITED.

Their main building is 160x50; store house and office, 75x 25. They employ 35 hands, and do a business amounting to $100,000 per annum. Capital employed, $55,000. The machines used here, are made at Nahum Stetson's works, Bridgewater. Two tons of plate iron are produced here daily. A 40 horse power engine drives the works. This company are also large manufacturers of tacks.

Silas L. Staples, manufacturer of brick, is successor to Ebenezer Staples, who established the business about forty years ago. Mr. S. employs 12 persons, making about one million per year, of 8 inch bricks, using one of Hall's machines.

J. R. Williams commenced the manufacture of fire brick, stove linings, tiles, &c. in June, 1847. The works are located on the Taunton Great river, a few rods from the Old Colony Railroad. The main building is 84x52, two stories, wood, with many small buildings attached, covering an area of 1½ acres. He employs 15 persons, consumes 900 tons of clay and 150 tons of coal, and produces 300,000 brick, and $5,000 worth of stove linings per year. A 30 horse power Chubbuck's engine supplies the power. Mr. W. commenced here with a capital invested of $300, and by perseverance and enterprise, has built up quite an extensive business, doing about $25,000 per year.

Johnson & Macomber, established the brick business on County street some 20 years ago. In 1867 an incorporated company was formed, called the Taunton Brick Company; E. H. Bennet, President, C. F. Johnson, Secretary and Treasurer, William F. Macomber, Agent. They occupy 68 acres; employing 80 men in 5 different yards. The company have a capital of $54,000, and improvements are constantly being made for producing successfully, brick of all kinds, of which they now produce 10 to 15 millions per year.

F. T. Wright & Son, Presbrey avenue, occupy a building 87x25 feet, 1½ stories with L. 22x33 feet, 1 story, for the manufacture of drain pipes and all kinds of stone and earthen ware; employ 10 persons and run a 10 horse power engine.

A. Field & Sons' tack manufactory. Albert Field, Esq., up to the time of his death, was senior proprietor of these works. He was born in Norton, Mass., July 4th, 1795. About the year 1812 he engaged in the manufacture of tacks by horse power. Soon after, he removed to Taunton and was employed by Messrs. Crocker & Richmond, extensive nail manufacturers. In 1827, he commenced the manufacture of brads, in a small building on the site of his present buildings, and with a machine built by himself. This establishment is said to be the oldest and most extensive of its class in the United States. Messrs. A. F. & Sons employ 300 hands, occupy 6 large buildings, and do a business amounting to nearly $750,000 annually. Over 200 machines of Reed & Blanchard's patent are in operation here, and upwards of 2,000 tons of metals of different kinds are consumed in the manufacturing of tacks and small nails per year.

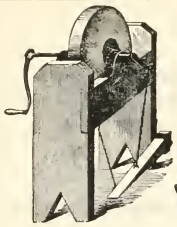
Power is furnished by 1 steam engine of 75 horse power, manufactured by the Taunton Foundry and Machine Co., and 1 turbine water wheel. This firm have lately constructed a fine brick building, with freestone trimmings and granite basement, 2½ stories; dimensions 38 x 53, which will be occupied as an office and sample room. It is situated on front end of the main building, with entrance on Spring street.

The senior partner of this house passed away the last of April, of this year. Mr. Field was a pioneer representative of the many immense manufacturing establishments in this country. Enterprising, and, withal, a gentleman the people lose a kind friend and a public benefactor.

Nathan Rand, carriage manufacturer, rear No. 1 Broadway. Mr. R. commenced business in 1832. He occupies one building, wood, of 3 stories 40x45, with wing 40x22, 2 stories, and manufacturing carriages, carriage trimmings, &c. Mr. R. does a business of from $5,000 to $6,000 per annum, and has in use one of Read's patent fire heaters, the first one manufactured.

One of the most extensive carriage manufactories in the section is that of Messrs. Peck & White, situated on Weir street, Nos. 19 and 21. Wm. L. White, Jr., established the business about the year 1853. In 1864, Mr. Peck associated himself with Mr. White. This firm do a business of from $30,000 to $35,000 per annum, occupy two buildings, and employ on an average 20 hands.

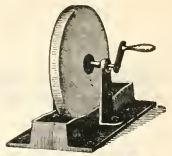
The Taunton Tack Co., whose works are situated on Union street, occupy a prominent position among its class of manufactories. This company was incorporated in 1853. Lorenzo Lincoln, President, and T. J. Lathrop, Treasurer and Agent; capital $20,000. They manufacture all kinds of tacks, brads and shoe nails; clout, trunk and finishing nails, and make a specialty of upholstering tacks. They occupy four buildings, the dimensions of which are as follows: main building, 3 stories, wood, 50x40 feet with wing, 2 stories, wood, 20x50 feet; also, 2 other buildings, each 24 feet square. The power is furnished by an engine made in New Jersey, of 20 horse power. Within a few years this company have made many improvements in their buildings and machinery, and are now about erecting a building on land formerly known as the Paper Mill estate, the same to be 200x40 feet with wing 50x40. Power will be furnished by engine, built by Putnam Machine Company, of 65 to 75 horse power.



C. F. POLLARD,

—MANUFACTURER OF—

POWER, TREADLE, AND PORTABLE,



GRINDSTONES.

Also, Grindstone, Greenstone and Soapstone Heel Wheels, and Hand Heel Stones,

NO. 6 WASHINGTON STREET, - - - LYNN, MASS.

JOHN D. GODFREY, brick manufacturer, Linden street. Mr. Godfrey commenced here in 1838, employs 6 hands and manufactures about 750,000 bricks per annum.

JAMES H. SPROUT, manufacturer of boxes and nail casks. This business was established by James Sprout, Esq., in 1838, in 1857 he was succeeded by J. H. Sprout, Esq., his son, who still continues the business here. He occupies four buildings and employs 35 hands. The power is furnished by one of Chubbuck & Sons' steam engines of 60 horse power. These works are situated on West Water street, Weir Village, and do a business amounting to $60,000 per annum.

WILLARD & LANE, Weir Village, manufacturers of paints and oils. Messrs. W. & L. established business about the year 1863. They occupy one building, (wood) 1 story, 30x40, used for grinding white lead and colors. Also, use one mill of stone for lead, and one of iron for colors. Power is furnished by a steam engine of 10 horse power. The capital is $10,000, and they do a business of about $22,000 or $23,000 per year.

WHITTENTON MANUFACTURING CO. manufacture cottonades, shirtings, dress goods, Canton flannels, &c. They employ 600 hands, running 20,832 spindles and 526 looms, consuming 1,400,000 lbs. of cotton annually. The factory is situated on Mill river, having 12 feet fall of water. The power is furnished by 3 Corliss engines; one of 80 horse power, and 2, each of 200 horse power, equalling 480 horse power. Charles L. Lovering, Treasurer.

TAUNTON STOVE LINING CO. This company established business here in March, 1864, with a capital of $15,000, and manufacture fire brick and fire brick linings. They occupy 5 buildings, viz.:—2 work shops, one 30x80, one 30x60; 1 packing room 28x80; 1 store house, 35x80; 1 kiln house, 75x60; and employ 19 hands. These works are situated on Highland, corner of Bow street, and do a business amounting to $30,000 per year.

SAMUEL LEE'S Foundry and Cutlery Works. Mr. Lee established business here in 1852; his works are situated on Purchase street, between School and Wilbur. He occupies one building, (wood) two stories, 85x35, with horse power and snagging room connected, and has in use the "Oscilator" steam engine of five horse power. Machine made Butcher family steels, patent combined tobacco cutter, with nut cracker and cork pressers, tinned cheese knives and butter spades, all of the finest quality, are manufactured here in large quantities.

MASON LOCOMOTIVE WORKS, William Mason, proprietor. This establishment is situated opposite the depot. He commenced the manufacture of cotton machinery in 1842. In 1845 he built this establishment. The main building is 320x50 feet, 3 and 4 stories, and French roof, another 60x150 feet, 3 stories with numerous smithies, foundries, boiler and erecting shops. The increase of business necessitated an enlargement in the fall of 1868, which is 60x100 feet, 4 stories.

Bishop's History says: "The founder of this splendid establishment belongs to that class of intelligent and ingenious mechanics who in spite of early disadvantages and by the force of native genius leave their impress upon the age in which they live. New England has been especially fruitful in such men and they in turn have rewarded her by making her the pride and glory of America. After a boyhood spent successively in the blacksmith's shop, the cotton mill and machine shop, we find Mr. Mason in 1829, when about 21 years of age, in Canterbury, Conn., constructing and setting up power looms for the manufacture of diaper linen, believed to have been the first adapted to this kind of work in the world. At a later period we find him in Taunton, which, after many sad disappointments and crushing reverses, caused by the failure of others, became the theatre of his future triumphs. It was here, when foreman for Crocker & Richmond, machinists, he perfected the great invention of his life, the 'self-acting mule' a machine now known and used in every well regulated cotton factory. Here in 1842, when his employers failed, he through friendly assistance became the principal owner and manager of the works. He manufactured cotton and woolen machinery, tools, &c., &c., up to 1852, when he made an addition to his works, and in 1853 brought out his first locomotive. When the locomotive branch of the business had become established, Mr. Mason commenced the manufacture of car wheels, in which like his locomotives, he made marked improvements. This is one of the few really remarkable manufactories in America, exhibiting in all its details so much system, combined with fertility of invention, that if its founder and proprietor were not living, we should feel called upon to speak of it in terms of enthusiasm."

TEMPLETON, 19 miles from Fitchburg and 37 from Greenfield, on the Otter river and the Vermont & Massachusetts Railroad. The village contains one church, about 900 inhabitants, and is located in a town by the same name. Several streams water this town and pass to the Connecticut by Miller's and Chicopee rivers. The surface is uneven but not mountainous. The town was incorporated in 1762.

PARKER, SAWYER & CO., occupy a 3 story wooden building for the manufacture of cane seat chairs. The business was established by Mr. Frederick Parker over 30 years ago, and was changed to the present firm in 1858. Employ 65 hands; turn out 85,000 chairs per annum. Their machin-

ery is driven by an engine of 30 horse power, built by the Putnam Machine Company, of Fitchburg, Mass. Do business to the amount of $125,000 per annum. Office and sales room, 170 and 172 North street, Boston, Mass.

Sawyer Bros., business established in 1856. They occupy a main building 3 stories in height 45x80, with saw mill attached, and several other small buildings for storing purposes. Manufacture cane seat chair frames. They employ 25 hands; use 4 planing, 2 rounding, 2 boring and 2 fitting machines, 1 belt saw mill, 2 gig mills and saws for straight and circular work; consume 500,000 feet lumber per year, and turn out about 6,000 frames per week. Their machinery is driven by a breast wheel, 24 feet in diameter, with a capacity of about 30 horse power.

River Mills. This mill was built by Dudman & Graham in 1836, and known as the Dudman Manufacturing Co., afterwards as Jones Manufacturing Co.; then Templeton Mills, and finally River Mills in 1866. The main building is 40x126 feet and 4 stories, with an addition 50 x 50 feet, 4 stories, built in 1866. Also, another building, formerly used for spinning 40 x 100 feet, 3 stories, with dye house, boiler and dry house, in addition. They employ 170 hands, manufacture doeskins and beavers, run 9 sets cards, consume 350,000 lbs. cotton per annum, and produce from 6,000 to 6,500 yards of ¾ cloth per week. A 60 horse power engine and 2 turbine wheels, under 13 ft. fall, drive their machinery.

F. T. Lamb occupies a shop 40x32 feet, situated about 2 miles from the station, for the manufacture of men's, boys' and youths' hand-made kip boots; employing 25 hands, and does a business of $30,000 per year.

At East Templeton, reached from this station, are J. G. Fales & Co., manufacturers of cane seat chairs; commenced business in 1863, occupying a 2 story building 30x60 feet, for a drying and binding shop, and another, 30 x 12 feet, 2 stories; employ about 6 hands, doing a business of about $5,000 per year.

TEWKSBURY, (See also Billerica and Tewksbury) 5 miles from Lowell and 8 from North Lawrence, a small village containing 1 Congregational church and 1 school house, on the Lowell and Lawrence Railroad.

George Lee occupies a wooden building located at Tewksbury Centre, for the manufacture of picker, lace and belt leather, commenced business about 1838, and has 7 employees.

Foster & Cole, manufacturers of cabinet furniture, commenced business in 1851, and occupy three 2 story wooden buildings of the following dimensions respectively: A milling house 50x30 feet, packing and finishing shop 40x26 feet, also a building 60x22 feet, used for putting their work together, situated at Tewksbury Centre. They have 30 employees and do business amounting to $50,000 per annum. An engine of 12 horse power drives their machinery. Office in Boston, 121 Fulton street.

H. L. Tingley occupies a 2 story wooden building 60x25 feet, located at Tewksbury Centre, for the manufacture of moccasons, of which he turns out about 800 dozens per year, doing business of $18,000. He commenced business in 1866, and has 9 employees.

TEWKSBURY JUNCTION, 6 miles from Lowell, 7 from North Lawrence and 18 from Salem, a flag station at the junction of the Salem & Lowell and Lowell & Lawrence Railroads.

THREE RIVERS, 68 miles from New London and 32 from Grout's Corner; a station between the towns of Monson and Palmer, at the junction of three rivers, from which fact the station took its name.

TILTON'S STATION, situated on the Neponset river 17¾ miles from Boston, 52¼ from Southbridge, and 35 from Providence; a village of about 400 inhabitants, on the Boston, Hartford and Erie Railroad, about one-eighth mile from depot. The only manufactory in the village is opposite the depot.

The Linden Iron and Steel Manufacturing Company. Incorporated 1865; Capital, $150,000. H. W. Tilton, President, W. S. Tilton, Superintendent, for the manufacture of carriage springs and axles, occupying buildings, the numbers and dimensions as follow:—No. 1, 40x100, 1 story, wood, foundry; 2, 40x20, 1 story, blacksmith's shop; 3, 40 x100, 1 story, forge shop; 4, 12x30, 1 story, office; 5, 25x 40, 2 stories, carpenter's shop; 6, 25x50, 2 stories, machine shop; 7, 120x40, 1 story, spring shop. In the blacksmiths' shop they have a 15 horse power overshot wheel, 10x8, to drive a trip hammer. In the forge shop, they have 2 trip hammers driven by an overshot wheel of 15 horse power, and a 10 horse turbine wheel. In the carpenter's shop they have a 10 horse power turbine wheel, for driving the saws, planers, &c., and in the basement, grinding of carriage springs. In the machine shop is a 35 horse power turbine wheel, which also furnishes power for the other shop.

In the spring shop their machinery consist of 1 rolling mill, 1 head making machine, an upright punch and one of their own patent machines for forming plates. They also have 8 machines for turning out carriage bolts; making several thousand per week. Employ 75 hands and turn out 75 set of springs and 50 set axles per week; using 750 tons iron and 600 tons coal per year, with about 150 cords wood for kindling fires.

TITICUT, 30½ miles from Boston, 4 from Middleboro', a country station on the Old Colony & Newport Railroad. The State Alms house is located here.

TOPSFIELD, 25 miles from Boston, 9½ from Salem, and 15 from Newburyport, a village and town on the Newburyport Railroad. Incorporated in 1650. A very pleasant town watered by Ipswich river and its branches. The surface is diversified by hills and valleys, and the soil is productive. Settled in 1642.

Charles Herrick & Co. occupy a 3 story wooden building 37x47 feet, located on Main street, for the manufacture of ladies', misses' and children's boots and shoes; commenced business in 1834; employ 70 hands, turn out 150,000 pairs, and do a business of $120,000 per annum.

Bailey, Saunders & Co., occupy a 2 story wooden building 40x28 feet, with L 50x24 feet, located on Main street, for the manufacture of ladies', misses' and children's shoes. Commenced business in 1863. Employ 35 hands; turn out 1,200 pairs of shoes per month.

Joseph Towne occupies a 2 story wooden building 30x 20 feet with L 21x13 feet, located on Main road half mile from station, for the manufacture of ladies', misses and children's pegged shoes. Commenced business in 1855. Employs 44 hands. Turns out 720 pairs per week, and does a business of $35,000 per annum.

TOWNSEND CENTRE, 10 miles from Groton Junction and 45 from Boston, a station in the town of Townsend, on the Peterboro' and Shirley Railroad. The surface of this town is rather level, the soil is generally light. It is watered by a branch of the Nashua. The town was incorporated in 1732.

TOWNSEND HARBOR, 8 miles from Groton Junction, a village on the Peterboro' & Shirley Railroad, in the town of Townsend.

TYNGSBORO' AND DUNSTABLE, 32 miles from Boston, 6 from Lowell, and 8 from Nashua, a station on the Boston, Lowell and Nashua Railroad. The village of Dunstable is 3½ miles from the depot, and is in the town of Dunstable. The surface of this town if level; some parts of it is good land, but generally it is light and sandy.

The village of Tyngsboro' is situated on the right bank of the Merrimac and contains 3 churches. It is in a town by the same name. This town was incorporated in 1789. The river here is wide, placid and majestic, and adds much to the beauty of the place. The soil in this town is light and sandy.

J. G. Upton commenced business in 1864, for the manufacture of packing boxes of different sizes. His works are situated about half mile above the depot at Tyngsboro', on a small stream which furnishes the motive power. This stream of water flows into the Merrimac river. His works consists of box factory and saw mill, the former being a two story and L building 22x54 and 40x26; the saw mill 40x80, 1 story. Employs 10 hands and turns out on an average 150,000 boxes per annum. The motive power is furnished from a 2 feet turbine wheel and 4 Blake wheels, three 2½ feet and one 1½ feet, all being under 20 feet head, combined horse power 110.

Muskuff Mill, established in 1864. The mill is 36x60 feet, furnishes employment for 10 hands, who manufacture cassimeres, flannel and yarn. Business done amounting to $10,000 per annum. A 16 horse power water wheel drives the machinery.

Brinley & James, this firm was formed in the spring of 1868, with the aim and endeavor to combine in one establishment the means of supplying every packing interest with every kind and description of wooden boxes, of sizes varying from confectioner's small boxes to the heavy factory packing cases. The business was established in 1866, by W. B. Brinley, a gentleman of large experience in this business. For the past year the total product of this establishment was nearly 4,000 boxes and cases, consuming 1,000,000 feet of lumber and yielding $40,000. The average number of men employed was 30.

The buildings are, for the most part, one story in height, and afford about 10,000 feet of flooring, for machinery and packing room. The motive power is furnished from a 40 horse engine, built by the Putnam Machine Co., of Fitchburg, Mass.

The additions to the factory recently completed, make this establishment the largest and most complete box factory in New England. There are four distinct departments, each under the direction of competent mechanics. In one is carried on the manufacture of heavy boxes and cases of ¾ inch stock; second, of lighter packing cases, ⅝ and ½ inch stock; third, every kind of ¼ and ¾ inch pine box, and in the fourth, on a larger scale, larger boxes.

Thus by the combination of these four departments, (each in itself a complete box shop in its specialty) the establishment is enabled to manufacture every kind of wooden boxes for which there is a demand.

The machinery now running consists of 5 planers, 3 swing saws, 5 squaring saws, 6 jointers, 1 sand wheel, 4 groovers, 1 veneer machine for sawing segar box stock from square timber, and 1 patent lock joint machine, of their own invention, capable of cutting 10,000 boxes per day.

The capacity of this establishment when in full operation, is about 3,000,000 boxes annually. The segar box department alone, is enabled to produce at the rate of 1,500,000 boxes a year. They invite the attention of the segar manufacturers, and claim as a great advance in box making the manner in which their boxes are cut and put together, by their patent machine, combining in a greater degree, neatness of finish, lightness, and greater strength, than any nailed or dove tailed box.

In connection with the box factory, they have one of Andrew's Box Board Mills, driven by a 20 horse portable engine, for cutting box boards, turning out about 2,000,000 ft. lumber per year. New England customers are supplied direct from their factory. New York and the West, from their salesroom, 140 Courtland street, New York City, where the boxes are shipped in stock and there set up.

UXBRIDGE, 24¾ miles from Providence and 18½ from Worcester, on the Providence & Worcester Railroad, is a manufacturing village of about 2,000 inhabitants, containing 4 churches and one bank. This town receives an excellent water power from Mumford and West rivers. This town was formerly a part of Mendon, and incorporated in 1727. Iron ore is found here and an abundance of beautiful granite.

H. & C. C. Capron occupy a 6 set mill situated near the depot for the manufacture of satinets. The company have been running only 2 sets and 20 looms; employing 40 persons and producing 1,200 yards per month.

Joseph Keith commenced the manufacture of shoddy in this place, in 1867. The mill is situated in nearly the centre of the village, and is about 80x30 feet, 3 stories, built of wood; runs 5 sets of cards, 2 pickers; producing 500 lbs. per day; employs 5 persons.

Richard Sayles runs a shoddy mill, 1½ miles from the depot. It has 6 sets of cards, and produces 600 pounds per day.

S. & W. Scott, commenced the manufacture of satinets in 1852. They occupy a mill 50x36 feet, 2 stories and basement with dye house 25x40 feet, 2 stories, located 1½ miles from the depot. They run 2 sets of machinery, 16 looms. Consume 500 lbs. of wool per week, and produce 500 yards daily. The mill is run by a Prince turbine, 3 feet wheel, the fall being 9 feet, located on the West river, a tributary of the Blackstone. The company have a 25 horse power engine, made by C. Gay, of Boston, which they use when needed.

C. A. & S. M. Wheelock are located one mile from the depot, occupying a mill 60x34, 3 stories, with ell 45x30, 3 stories with boiler, wool, dye picker house and office attached. The mill was built of wood, many years ago. J. Wheeler & Son, (C. A.) commenced the manufacture of stocking yarn here in 1834. In 1840 S. M. Wheelock, the other brother, was admitted, making the firm J. Wheelock & Sons, the present firm succeeding in 1846. They run at present, 4 sets of woolen machinery, 22 looms, consumed for the year previous to January 1st 1868, 152,706 pounds of wool and produced 110,412½ yards of fancy cassimeres,

employ 70 persons. The power is furnished by a Fall River 5½ feet turbine wheel the fall being 10 feet. The mill is located on West river, a tributary of the Blackstone. In case of necessity, a 25 horse power Corliss engine is used. Hunt, Tillinghast & Co., 70 & 72 Reade street, New York, selling agents.

Uxbridge Card Clothing Co., J. C. Keith, C. A. Taft, and H. T. Wing, proprietors, commenced the manufacture of card clothing in 1866. Their manufactory is located on Mumford river, near the depot, and can be seen from the cars. The building is 67x22, 2 stories, built of wood. They employ 8 persons, using 29 first-class machines all new, of the most approved kind, producing about 90 square ft. of the best of card clothing per day. The power is furnished by a Tyler turbine, 14 inch water wheel, the fall here being 12 feet. This company though comparatively young, have met with much success since their commencement, from the fact that practical ideas and financial ability insures it.

D. W. Taft commenced the manufacture of fancy cassimeres here in March, 1869, being successor to Taft, Weeden & Co., who commenced here in 1859, as successors to Southwick & Sayles, who commenced here in 1854, the mill being built in 1853. It is 43x90, 4 stories and attic, wood, with L 25 x 50, 2 stories and attic. This mill has 8 sets of woolen machinery, 40 looms; employ 120 persons. During the year 1867, they consumed 255,979 lbs. of wool, producing 199,000 yards of fancy cassimeres. The power is furnished by 1 Fall River water wheel, the fall here being 9½ feet, with power enough to drive a 30 set mill. It is known as the Central Mill and is located on the Blackstone.

Uxbridge Woolen Mills. R. & J. Taft, proprietors, commenced the manufacture of fancy cassimeres in April, 1868, as successors to W. D. Davis & Co. The main mill is 160 x50, three stories and attic; another, 120x30, four stories. They employ 175 persons and consume 400,000 pounds of wool, and produce 250,000 yards annually. Running 12 set of woolen machinery. The power is furnished by two Fall River nine feet water wheels, the fall being nine feet. The mills are situated on the Blackstone river, about one mile from the depot.

VAN DEUSENVILLE, 23 miles from Pittsfield, 15 miles from State line, and 87 from Bridgeport. A village of about 400 inhabitants and 2 churches, on the Housatonic R. R., in the town of Barrington, Berkshire Co. About ¼ mile north of the station a branch road to West Stockbridge and State line leaves the main road. This branch is under the control of the Housatonic R. R. Co.

WACHUSETT, 3 miles from Fitchburg, 39 from Keene and 53 from Greenfield, a village in the town of Westminster, on the Vermont and Massachusetts Railroad, about 2 miles from the depot, which is a flag station.

WADSWORTH, situated on the Neponset river, 30 miles from Boston and 40 from Southbridge, on the Boston, Hartford & Erie Railroad, a village of about 200 inhabitants and 1 church.

WAKEFIELD, 10 miles from Boston and 17 from Lawrence, a station and town on the Boston and Maine Railroad. The town was incorporated in 1812, under the name of South Reading, changing the name to Wakefield, July 4th, 1868. The town contains 13 schools with 664 scholars, has 6 churches, viz.: 1 Orthodox, 1 Baptist, 1 Universalist, 1 Catholic, 1 Methodist and 1 Adventist, contains 1 bank, called the South Reading National, capital $100,000. Value of real estate and personal property $2,000,000. Number of inhabitants 4,000. Has a public library, established in 1858, with 3,200 volumes. This town was taken from Reading in 1812, and contains a large and beautiful pond, the source of Saugus river. The village of Wakefield is compact, neat and flourishing.

A. N. & A. G. Sweetser, occupy a 1½ story wooden building, 27x18 ft. located on Main street, for the manufacture of ladies', gents', misses' and children's shoes, commenced business in 1837, employ 25 hands, turn out 20,000 pairs of shoes, and do a business of $16,000 per annum.

J. & W. H. Atwell & Co., occupy a two story wooden building, 24x24 ft., another room in a two story building 12 x25 ft., located on Prospect street, for the manufacture of razor straps, commenced business in 1849, employ 12 hands, turn out 400 dozen per month.

John G. Aborn occupies a three story wooden building 35x28 feet, located on Main street, for the manufacture of ladies', misses' and children's shoes; commenced business in 1856; employs 25 hands, turns out 30,000 pairs per year, and does a business of $35,000 per annum.

J. M. Evans occupies four rooms in a dwelling house, each 14x12 ft. located on Salem street, for the manufacture of ladies', misses', boys' and youths' slippers. Commenced business in 1832; employs 14 hands, turns out 200 pairs per week, and does a business amounting to $8,000.

E. H. Walton occupies a two story wooden building 28x 40 feet, located on Albion street, for the manufacture of ladies', misses' and children's boots, shoes and slippers. Commenced business in 1834. Employs 50 hands.

Thomas Emerson & Sons, occupy a 4 story wooden building 50x90 feet, located on Main street for the manufacture of men's, ladies', misses' and children's boots and shoes. The business was commenced by Thomas Emerson in 1805. Employ 125 hands; their machinery is driven by an engine of 18 horse power, built by Campbell, Whittier & Co., of Boston, with 1 flue boiler, 24 horse power, built by Allen & Endicott, of Cambridgeport. Turning out 150,000 pairs of boots and shoes, and do business to the amount of $200,000.

L. B. Evans occupies the L to his dwelling house, two rooms 16x24 feet, located on Main street for the manufacture of ladies', misses' and children's shoes. The business was commenced in 1834. Employs 16 hands; turns out 20,000 pairs per year, and does a business of $20,000 per annum.

Wakefield Rattan Works. This company occupy 16 buildings, covering 7 acres of ground, for the manufacture of rattan fabrics, chair seating, &c. This business was established in 1856, in a small way, employing but a few hands. Now they have between 500 and 700 employees. They have two 100 horse engines, made by the Swamscot Machine Company, for driving their machinery. This company and the American Rattan Company in Fitchburg, are the largest establishments of the kind in the United States.

WAKEFIELD JUNCTION, 9½ miles from Boston, and 18 from Lawrence, a station on the Boston and Maine R. R., and at the junction of the South Reading, or Wilmington Branch and Danvers R. R., with the former road. This station was formerly called South Reading Junction, changing to its present

name July 4th, 1868. It is located in the town of Wakefield, formerly South Reading.

WALPOLE, situated on the Neponset river and Boston, Hartford and Erie Railroad, 19 miles from Boston, 51 from Walpole and 24 from Providence (by turnpike), a pleasant village of about 1,000 inhabitants and two churches. A village and town by the same name. The town is watered by three branches of the Neponset river, which meet at this place.

WILLARD LEWIS commenced business in 1863, for the manufacture of cotton bats, and carpet lining, in a 2 story brick building 40x60, and a 2 story wood building 30x60, store houses 45x30, 2 stories, 50x36, 1 story and a 2 story building 28x36, boiler house 14x20, with a 15 horse power engine of Rawson's upright pattern, Harrison's boiler. The machinery consists of 18 cards, 1 lapper, 4 willows, 3 presses for the making of batting. For carpet lining, 1 spreader, quilter, folder and measurer. Manufacture Fales' improved Harrison's patent carpet lining for George W. Chipman & Son. He gives employment to 30 hands and turns out 1,350,000 yards carpet lining per year, and 1,100 lbs. batting per day, using about 3,000 lbs. clean waste, and 3½ tons paper per week. The motive power is furnished by 14x12 breast wheel of 12 horse power and a Chase turbine wheel of 12 horse power.

S. & A. E. CLAPP commenced business in 1865. The business, manufacture of cotton thread, was established in 1848, in a building 50x32, one story and basement. Employ 7 hands, and turn out about 700 lbs. thread per month, No. 28. The machinery is driven by a 10 horse power turbine wheel.

E. P. STETSON commenced business in 1866, as successor of Everett Stetson, who established the business in 1845, for the manufacture of card clothing in a three story building 60 x25, with ell used for carpenter's shop 25x15, 1 story; in the second story of main building they have 40 machines for making card clothing, with facilities for turning out 125 square feet card clothing per day. The wheel house 15x15, contains a 30 inch diameter turbine wheel of 25 horse power for driving the machinery. Employs 9 hands.

I. GILL & SONS, commenced the hat forming business in 1865, occupying 3 buildings, and running 3 hat framing machines, turning out 150 dozen forms per day, employing 20 hands. The motive power is furnished by a 14 horse turbine and 15 horse breast wheel, 12 feet fall.

S. GRAY & CO., bleachers and dyers of yarns, were established about 1835. They occupy one building 50x75, 2 stories, one 50x30 1 story, employ about 10 men, color about 100 tons of yarn and bleach 100 tons annually.

WALTHAM, 10 miles from Boston, 40 from Fitchburg and 53 from Providence, a village and town on the Boston & Fitchburg Railroad, and at the terminus of the Watertown Branch. This is one of the most beautiful towns that environs the metropolis of New England. The surface is moderately level with some elevations. Prospect Hill, 470 feet above the level of the sea, presents a delightful view of Boston, its harbor and the adjacent towns. The soil is generally not very fertile. It was in this town that spinning and weaving of cotton goods, under the same roof, by power, was commenced in the country. The same mill is yet in successful operation, being the oldest corporation here and one of the first in the country. Waltham has a population of about 8,000, 7 churches and 2 banks.

MANUFACTURERS.

THE BOSTON MANUFACTURING CO., incorporated in 1814, with a capital of $600,000, for the manufacture of sheetings and shirtings, situated on River street. The buildings then were small, compared to what they are at the present time, the main building then being 90x43, 3 stories. Now they have two large buildings joined together of 325x43 and 200x80, three stories and attic each. The engine which drives the machinery in connection with 6 turbine wheels of 100 horse power each, is situated in the basement of the large mill, being a Corliss steam engine of 600 horse power. The boilers which are tubular pattern, are in a boiler house (in rear of mill) 50x60, 1 story, they furnish steam for this monstrous engine, and also heat the mill and other buildings. Also in rear of the mill is the machine shop 60x32, 3 stories, cloth room building 70x30, 1 story. In front of the mill on the street is their cotton house, capable of holding 4,000 bales cotton, store house adjoining 120x36, 1 story.

This company run 43,000 spindles, 750 looms, using 45,000 lbs. cotton per week, (8000 lbs. cotton for yarn for their stockinet factory, full description below,) turning out shirtings, sheetings, corset jeans, and silecias; from No. 30 yarn they make 36 inch shirtings, and 42 inch pillow case goods; from No. 22 yarn 42, 60, 80, 90 and 100 inch sheetings. The officers of the company are J. A. Lowell, president, George Atkinson, treasurer, I. R. Scott, agent.

The Waltham Bleachery and Dye Works situated on River street, opposite the bleachery depot, is owned and run by this company. The buildings cover 8 acres ground, mostly 3 stories of brick. The capacity of this works are for bleaching 10 tons goods per day, and dyeing 8000 pieces per week, (a piece of goods average 40 yards.) In this branch of their business they employ 200 hands.

In the yard they have 3 Corliss engines, of 500 horse power combined, with the necessary tubular boilers for furnishing steam to run the machines in these works.

In the same yard, a hosiery mill of four stories 100x43 ft. built of brick, and dating its history as being one of the oldest mills in the State. Here, some fifty years ago, the first piece of cotton cloth was produced by the power loom, then comparatively an experiment, which has since grown into giant proportions.

The machinery in this mill is driven by a 75 horse power Corliss engine, and consists of 212 circular looms, from 22 to 40 gauge, making 750 dozen pairs per day; also, 9 rotary power machines from 26 to 32 gauge, and 11 hand machines, producing 80 dozen pairs of fashioned hose per week, together with other regular made work of different degrees. The whole consuming 8,000 pounds of cotton yarn per week, ranging from No. 8 to 40, all of which is made at the main mill.

This branch of industry employs 220 hands, of whom nine-tenths are females, besides 100 females engaged at their homes in seaming and finishing other kinds of work, which from its nature, cannot be conveniently completed in the mill.

The goods having gone through their various stages of manufacture, are passed into the bleachery, where the arrangements are of the most complete order for supplying the works with hot and spring water, and every other essential for converting them into the fairest whiteness. After this process they are neatly folded, tastefully banded and packed in paper boxes of one dozen each. These boxes are made in the mill connected with the hosiery, and forms quite an item of business. The whole of the labor in this department is done by girls.

For any new branch of manufacture to assert a position in the market in the face of imported goods, is no easy task, and so, in the infancy of this business considerable prejudice

had to be met and fairly fought down before consumers could be induced to believe that domestic goods were equal to the imported. Having succeeded in establishing their position, these feelings have given place to better confidence, resulting in the appreciation of every effort to bring our native productions on a favorable comparison with European manufactures.

This business is one of the many illustrations of American enterprise and steady perseverance. Its success brings happy reflections to the originator and a pleasing reward to all interested.

Among the establishments which have made Waltham better known to the world at large, is the corporation of The American Watch Co.

This company was incorporated in 1854, with a capital of $750.000. The officers are as follows: I. W. Mulliken, president, R. E. Robbins, treasurer, and A. T. Bacon, superintendent. They manufacture watches of eighteen different styles.

They have erected for themselves, a fine large building in the shape of a double H. The front and rear buildings being 325 feet long and 2 and 3 stories high. The buildings are divided into 20 departments with 31 rooms, having 20 foremen, and 16 assistants, 1 master mechanic, and 2 superintendents, each distinct from the other. Employing at present 500 persons, $\frac{1}{3}$ being females, requiring 4,550 feet of benches, or $\frac{9}{10}$ of a mile to seat them when at work. The flooring contains 46,054 square feet, or over an acre. The buildings are lighted through the day from 1246 windows. For gas and water piping they use 37,700 feet, over 7 miles. The machines number over 1500 and so noiselessly do they run, that a person standing under the windows, would suppose the hands were having a holiday.

It requires 3,000 feet main shafting to drive these machines, power furnished from 2 Corliss steam engines of 25 and 30 horse power, supplied with steam from 4 tubular boilers made by Kendall & Roberts. These boilers also furnish steam for heating the buildings.

The buildings of the factory surround 4 courts 100x50. Said courts are tastefully laid out in walks, ornamented with flowers and shrubs. In front of the factory is a park 300 feet square, arranged with walks similar to the courts.

The company have built 68 tenement houses and 2 boarding houses for the accommodation of their workmen.

The watches of this company are considered the finest in the world. They have turned out in one day 300 watches.

George E. Hobbs, machinist and machinists' tool manufacturer, commenced business in a 2 story building; power furnished by Messrs. Davis & Farnum in 1865; employs 4 hands and does a business of about $7,000 per year.

G. W. Daniels commenced business in 1858, on Main street, opposite the Central Hotel, for the manufacture of hardware and shoe tools, occupying a 2 story building 33x 33, L 35x20, 2 stories; employs 6 hands. His machinery, consisting of 3 engines and 6 hand lathes, besides drills, &c., is driven by a 6 horse power engine made by George H. Fox & Co. of Boston, furnished with steam from an upright tubular boiler made by Kendall & Roberts of Cambridgeport.

Messrs. Cushing & White commenced business on Moody street, near the bridge in 1867, occupying the second story and attic of building 50x50, $2\frac{1}{2}$ stories, for the manufacture of copper vanes, giving employment to 7 hands. Messrs. C. & W. are artists in their line of business, and their work gives perfect satisfaction.

Davis & Farnum, commenced business in 1863, on Felton street, for the manufacture of steam, gas and water pipes. Their foundry building is 100x75 feet, 1 story, machine and carpenter shops, 60x40 feet, 3 stories. They employ 65 hands, using about 12 tons iron for a daily production, consuming 8 tons coal yearly. The motive power for machine shop is furnished by a 30 horse power engine, built by themselves; steam furnished from a tubular boiler.

Stowe, Bills & Co., manufacturers of brogans, commenced business as successors of L. S. Jones & Co, in 1867. Established in 1865 by L. S. Jones & Company. Their factory situated on Bacon street, is 30x40 feet, L 24x 30 feet, 2 stories. They employ 40 hands, turning out 15 to 20 cases per week.

Parmenter & Walker, manufacturers of crayons and lotion. The business was established by Dr. Field, in 1845. They occupy one room, employ five hands, and produce 500 gross per day.

The Eureka Clothes Wringing Machine Co. occupy two floors of a three story brick building 200x100 ft. located here for the manufacture of clothes wringers. This firm commenced business in 1863; have 50 employees, and turn out 1,000 wringers per month. Their machinery is driven by a 60 horse power engine, with one cylinder boiler, built by Corliss Steam Engine Co., of Providence, R. I. Do business to the amount of $100,000 per annum. Office and salesroom, 113 Court street, Boston. T. J. Alexander, is agent of this Co.

Wareham, is at the head of sloop navigation on Buzzard's Bay. The village of about 1,500 inhabitants, containing 2 churches, is situated $49\frac{1}{4}$ miles from Boston, and 30 from Hyannis, on the Cape Cod Railroad. At this village there is an extensive iron and steel manufactory, called the

Franconia Iron and Steel Co. Established in 1864, for the manufacture of bar iron, round, flat and square, hoop and band iron. Employs 100 hands, and turns out about 3,500 tons yearly. Run an engine of 200 horse power for driving trip hammers, &c. Wm. E. Coffin, Treasurer. Wm. E. Coffin & Co., selling agents, Boston.

Warren, 73 miles from Boston and 128 from Albany, a station in a town by the same name, on the Boston & Albany Railroad. A large portion of the lands in this town, are uneven and hilly, but the soil is warm and favorable to the growth of grain and the support of sheep.

Knowles & Sibley commenced the manufacture of steam pumps in 1857, in Springfield. They removed to this place in 1861, to their new works, so that they should be under their own supervision. Previously they had let the making of the pumps to a contractor. The main building is 3 stories, 110x35 feet and basement. Connected with the works is their foundry, a 1 story building 24x75 feet, where all the casting is done.

They employ 75 hands and build pumps from 150 pounds to 10 tons. They use 25 tons iron castings, 2 tons brass casting per month, turning out between 700 and 800 per year. The motive power is furnished by a 15 horse turbine wheel and a 15 horse steam engine, made by Andrews, New York, their boiler is one of Campbell, Whittier & Co.'s tubular pattern.

L. J. Knowles commenced business in 1847, for the manufacture of satinet warp, occupying a 3 story building 80x45, with attic; employing 25 hands; running 1,509 spindles, using about 350 lbs. cotton per day; motive power furnished by 2 turbine wheels, 30 horse power combined, 42 feet each, 14 inch deep, 6 feet fall.

Wm. B. Ramsdell, manufacturer of men's, boys' and youths' patent kip, thick and calf boots. The business was established in 1865, by Ramsdell & Tripp. Mr. R. occupies 3 story building 30x70 feet; employs 30 hands, producing 8 cases goods daily, particularly adapted to the Western and New England trade.

WASHINGTON, 62 miles from Albany, and 138 from Boston, on the Boston and Albany Railroad. A small village and town by the same name in Berkshire county; a mountainous town, watered by branches of the Westfield and Housatonic rivers.

WATERFORD, 17¾ miles from Providence, 25½ from Worcester; a manufacturing village on the Providence and Worcester and on the Boston, Hartford and Erie Railroads. The Blackstone river flows between this village and Blackstone.

Evans, Seagrave & Co. commenced the manufacture of fancy cassimeres, September, 1848. Their main building was built in 1864, being 350x50, four stories and a basement—a complete mill, running 24 sets of woolen machinery, 58 broad and 56 narrow looms. Employ 400 persons, consuming 1,000,000 pounds of wool per year, and producing 700,000 yards of moscow beavers, chinchillas, silk mixtures, fancy cassimeres, &c. The power is furnished by three Fall River turbine water wheels, 9 feet in diameter, the fall here being 8½ feet. An 180 horse power Corliss engine furnishes steam power when needed. The office of the company is at 34 North Main street, Providence, R. I. The selling agents, Low, Harriman & Co., Worth, corner Church streets, New-York.

F. M. Ballou & Co. commenced here in 1848. They occupy a mill running 10 sets of woolen machinery; employing 200 persons. They consume 1,500 pounds of wool per day, the annual production being 350,000 yards fancy cassimeres, &c. The power is furnished by two Fall River 9 and 5 ft. turbine wheels, the fall being 10½ feet. They run 52 looms. This company is F. M. Ballou, Bailey W. Evans, Caleb and Geo. E. Seagrave.

Needham & Mason, occupy a 4 story wooden mill, built about 1824, for the manufacture of fancy cassimeres, commencing here in November, 1867, as successors to Evans, Seagrave, Mason & Company. 450,000 pounds of wool are used annually, producing 1,000 yards per day, running 12 sets of woolen machinery. A Fall River, 9 feet, turbine wheel furnishes the power, the fall here being 8½ feet. Their Agents are: Whittemore, Peet, Post & Co., Chestnut, corner Leonard street, New York.

WATERTOWN, 8 miles from Boston and 2½ from Waltham, a village and town on the Watertown Branch Railroad, and Charles river. The village contains 5 churches and about 5,000 inhabitants. Charles river is navigable to the centre of the town for vessels of 6 to 7 feet draught of water. The surface of the town of Watertown is diversified by hills and valleys which is rendered very beautiful by a high state of cultivation and by the numerous villas, neat farm houses, cottage and delightful gardens which meet the eye in every direction. The town was first settled in 1630, and incorporated the same year. The Indian name was Pigsgusset.

Hollingsworth & Whitney commenced business on Pleasant street in 1862, for the manufacture of manilla paper. Their main building 60x200, 2 stories with engine room attached 30x60, 1 story is their factory; they also have 4 store houses. This firm employ 70 hands, using 30 tons hemp rope per week, turning out 4 tons paper per day; they have 12 pulp engines of 300 lbs. each. The motive power is furnished by 2 Corliss steam engines of 215 horse power combined, having 5 tubular boilers of Kendall & Roberts' make; also use a 30 horse turbine wheel 7 feet diameter, 6 feet fall. This firm in connection with their paper manufactory, have lately put up a machine, for making paper bags, by which they can man 400,000 per day.

Dalby Mills, built in 1861, by Thomas Dalby. Incorporated into a company February, 1865. At the present time, O. H. Sampson & Co., Boston and New York, are their selling agents. Wm. S. Whitwell, Boston, Treasurer; G. M. Dayton, Agent at mill. The buildings embrace mill, 3 stories high, French roof; wareroom, 2 stories, French roof; shop for stockingers; dye house; engine and boiler room. Manufacture all kinds of yarns; Cardigan jackets; men's, ladies' and misses' hose; ladies' and misses' gaiters, gloves, mittens, shirts, drawers, etc. Run 6 sets of cards and about 100 stocking looms. Hire about 400 hands. The engine is 100 horse power.

Miles, Pratt & Co., occupy a 2 story brick building 80x70 feet; also, a foundry 230x50 feet with out buildings for store house, &c., covering about an acre of ground, located on Main street, where are employed from 90 to 100 hands in the manufacture of stoves, comprising upwards of 20 different patterns. Commenced business in 1855; turn out from 1,500 to 2,000 tons of castings per annum. Power furnished from 1 of Rider's new turbine water wheels, 30 horse power; also, run a steam engine of 3 horse power, with one tubular boiler, both built by Campbell & Whittier, of Boston, Mass. Do business to the amount of $200,000 per annum. Office and sales rooms, 112 and 114 North street, Boston.

WAVERLY, 7 miles from Boston, and 43 from Fitchburg, a village containing about 150 inhabitants, situated on the Boston and Fitchburg Railroad.

WEBSTER, 16 miles from Worcester, 44 from Norwich, and 57 from New London. Located on elevated ground, this place commands a view of the French river, on which is situated most of the manufactories. The place has 5 churches, 1 bank and 2 hotels. The population in 1860 was 3,000 which has since increased to 4,500. The Norwich and Worcester, and Boston, Hartford and Erie Railroad cross here. Water works have lately been introduced, streets graded, side walks put down, which adds to the general appearance of the place, which has an air of thrift and enterprise generally.

MANUFACTURERS.

Samuel Slater & Sons, own and conduct a greater part of the manufacturing interests of this place, although other large manufacturing establishments are located here. The firm was established in 1830. H. N. Slater one of the firm is the only living son of Samuel Slater, the father of cotton manufacturing in this country. This firm own three establishments or villages, North Webster, East Webster and Webster, respectively each one located at either point of a triangle, the base of which is one mile. This triangle embraces the original farm and homestead of Samuel Slater, who died in 1835. At North Webster, they occupy several mills and buildings for the manufacture of grey cambrics,

where they run 32,000 spindles and 520 looms, employing about 400 persons, consuming 35 bales of cotton and producing 90,000 yards per week, using No. 45 yarn.

This establishment is on the French river; 2 breast and 1 Leffel wheel furnish the power, the fall being 18 feet. At East Webster, is the mill built by Samuel Slater in 1812, and is the original building where cotton cloth was first made in this country. It is 112x32, three stories, to which additions have been made from time to time. This was used as a cotton mill till 1861, when this company established a bleachery, dyeing and calendering works for finishing their own and other cotton goods, finishing 4,000 pieces per week. A breast wheel furnishes the power, the fall being 25 feet. A 60 horse power engine is used when needed, built by the Providence Steam Engine Co. The mill is located on a beautiful sheet of water, four miles in length, which in connection with the French river, give this place a large and unfailing water-power. The original name of this pond, as appears from ancient deeds, was Chabanakongkomom; other records spell it, Chargoggagoggmanchoggagogg; the modern way into which it has been corrupted, is, Chaubunagungamaug. The water from this lake empties into the French river above N. Webster, with a fall of 24 feet, and in connection with this river, furnishes the power for their manufactory at that place and the

Slater Woolen Co., Webster, which was incorporated January, 1866, with a capital of $500,000, H. N. Slater, president, H. N. Slater, jr., treasurer. This company run 32 sets of woolen machinery, a part of which (spinning, &c.,) is done at East Webster. They employ about 600 persons, consume 1,300,000 pounds of South American and Cape Wool, and 800,000 pounds of American wool per year, producing 550,000 yards of double width broad cloth, beavers, &c., 3 breast wheels and one Ames turbine wheel furnish the power, the fall being 18 feet. The buildings and machinery occupied and run by the Slater Woolen Company are owned by Samuel Slater & Sons, who lease it to this company. It may be of interest to state that the nucleus of the Slater Woolen Company was established in 1817, at East Webster, in the Slater Cotton Mill, by Edward Howard, of Yorkshire, England, who made broad cloths. He was a fat jolly Englishman, weighing about 300 pounds, addicted to drinking "bitter beer." He died in a poor house in his native country, in 1866.

Stevens' Linen Works. Henry H. Stevens, Proprietor. This business was established in 1846, the manufactory was built in 1863. It is a fine substantially built stone building the foundation being laid on a solid rock. The main building is 205x70, 5 stories with two wings 110x40, 3 stories and 83x24, 2 stories respectively; this with 2 small stone mills and other buildings comprise the works. A bleachery situated a few rods distant for the finishing of the goods is 220x50, 1 story. The power for the main mill is furnished by 2 breast wheels 40 and 20 feet respectively. the fall being 57 feet. A 60 horse power Corliss engine is used when needed. They run a cotton mill in connection where diaper is made, after which a linen finish is put on. They employ 400 persons and consumed in the year 1868, 1,109,646 pounds of linen and produced 3,021,744 yards of crash and diaper. The mill is located on Powder Horn Brook, a tributary of the French river. The superintendent of this establishment is E. S. Stevens. Sutton Smith & Co., 83 and 85 Worth street, New York, and Wyman & Arklay, 69 Summer street, Boston, selling agents.

Most of the shoes made by R. Humphrey are sent to Chicago and other places in the West. He employs 100 hands in the manufacture of women's, misses' and children's hand and machine pegged shoes, of calf, kip, grain and buff leather, turning out about 2,000 cases per year.

The foundry of Joseph Colvin, a building 70x50 feet, was built last Summer, and is used for the manufacture of all kinds of machinery castings. He has in use a McKenzie patent stack made by Stewart & Dillon of Worcester.

J. H. Perry & Son commenced the manufacture of fancy cassimeres in 1863, occupying a mill building 128 x 40 feet, with out-buildings necessary for carrying on the woolen business. Run 5 sets woolen machinery, employing 90 hands and consuming about 4,500 lbs. wool for a weekly production. The motive power is furnished from a Tyler wheel, under 9 feet head. The buildings are heated by steam from a Hinkley boiler, which also furnishes steam for dye house, finishing room, etc. The mill was built in 1827, and run until 1863, for the manufacture of satinets, by J. H. Perry & Co.

B. A. Corbin & Son. The senior commenced business in the adjoining town of Dudley, some twenty-five years ago. As B. A. Corbin & Son, the firm has existed since 1862. Their work is mainly done outside of the manufactory. They use for the preparation of the work, getting it in readiness to put out to the bottomers, and fitters, two buildings 1,—100 feet long, 30 feet wide, and 3 stories high, the other 60 feet by 30, 2 stories high. Their employees upon the premises number about 100, while those outside number 200 more. They manufacture women's, misses,' and children's pegged boots and shoes. They turn out from the different lines, about 1,000 to 1,200 pairs per day. The business done amounts to from $350,000 to $400,000 per annum.

O. F. Chace & Co., established business in 1861 for the purpose of manufacturing fancy cassimeres. The size of their buildings is as follows: 1st, 166x42 feet, 4 stories high, 2d, 120x30 feet, 3 stories high; 3d, 61x30 feet, 3 stories high; 4th, 64x30 feet, 1 story high; 5th, 150x30 feet, 1 story high and attic. They run 8 sets of cards, 2000 spindles and 24 broad looms, producing 6000 yards per week ¾ yard wide. The factory is located on French river, 10 feet fall, and power enough for 16 sets of machinery.

WEIR. A station on the suburbs of Taunton, one mile from the main depot. The Old Colony and Newport Railroad and Middleboro' and Taunton Railroad cross here.

For list of Manufacturers, see Taunton.

WELLESLEY, 15 miles from Boston and 29 from Worcester, a station in the town of Needham on the Boston & Albany Railroad.

C. B. Lovewell occupies a 3 story wooden building 32x40 feet with an L, 2 stories, 15x20 feet, for the manufacture of men's, boys' and youths' boots and shoes. Commenced business in 1853. Employs 40 hands. Turns out 2,000 pairs per week. Runs an 8 horse power steam engine, built by Thomas Leavitt & Company, of Boston, Mass., 1 upright tubular boiler, 12 horse power, built by Allen & Endicott, of Cambridgeport, Mass. Does a business of $100,000 per annum.

WENHAM, 22 miles from Boston, 6 from Salem, 16 from Newburyport, and 18 from Lawrence. A station and town on the Eastern Railroad. The town of Wenham was first settled in 1639, and incorporated in 1643. It is 6¾ miles in length and 2¼ in width, at the widest, and half a mile at the narrowest part. Its area is about 8¼ miles, or 5,400 acres; the surface is level and considerable of it is rather low and swampy. The

C. B. LOVEWELL,
Manufacturer of Men's, Boy's, and Youths,' Wax, Kip, and Split,
Boots, Brogans, Balmorals, & Plow Shoes,
WELLESLEY, MASS.

highest elevation is Ford's Hill, from which point a beautiful prospect of the sea and of Salem harbor can be had, as well as of the country for miles around.

There are in this town, 2 churches, 1 Orthodox and 1 Baptist; also, 5 school houses, 1 grammar and the rest mixed. The inhabitants number 1,000; voters, 228; and the number of children attending school is 200. Wenham or Enon Pond is a beautiful sheet of water about a mile square. The first sermon preached in this place, was on the borders of this pond, by Hugh Peters, minister of Salem, about the year 1636. His text was, "At Enon, near Salem, because there was much water there."

WEST ACTON, 27 miles from Boston and 23 from Fitchburg, a village of about 400 inhabitants and 2 churches in the town of Acton, on the Boston and Fitchburg Railroad.

WEST BARNSTABLE, situated 69½ miles from Boston and 10 from Hyannis, on the Cape Cod Railroad. The inhabitants here, as in most of the towns below on the Cape, are more or less engaged in the fisheries. This village contains about 200 inhabitants.

WEST BERLIN, 41¾ miles from Boston and 16½ from Fitchburg, a country station in the town of Berlin on the Boston, Clinton & Fitchburg Railroad.

WESTBOROUGH, 32 miles from Boston and 12 from Worcester, a village and town on the Boston & Albany Railroad. The town was taken from Marlborough in 1717. The waters of the town consists of some sources of Concord and Blackstone rivers, which furnish a good water power. This is a very pleasant town. The surface is diversified by hills and valleys; the soil is good. This is the native town of Eli Whitney, the inventor of the Cotton Gin. This town has a population (1868,) of 3,500, 490 dwelling houses, 12,186 acres of land, 5 churches, 13 school houses; valuation of real estate $1,074,638, personal property $448,409. Rate of taxation $14.15 on each $1,000. No. of poles 825; No. of tax payers 1,035.

F. H. Fairbanks occupies 1 floor in a two story wooden building 28x30 feet with basement, located on South street, for the manufacture of sleighs; commenced business in 1835; employs 1 person and turns out 150 sleighs per annum.

N. Carter occupies 1 floor in 2 story wooden building 28 x30 feet, located on South street, for the manufacture of sleighs, employs 1 person and turns out 100 sleighs per annum.

George Forbes occupies a 3 story wooden building 40x 80 feet with basement, located on Cottage street, for the manufacture of hand made boots; commenced business in 1853; employs 75 hands and turns out 4,000 cases per annum.

Forbes & Fisher occupy three wooden buildings, 3 stories each, containing 14,000 square feet of room; also, two store houses, located on Summer street, rear of Union Block, for the manufacture of sleighs. Commenced business January, 1868. Business first established in 1858; employ 14 hands, and turn out 800 sleighs per annum. Capital, $15,000.

Snow & Fellows occupies a three story wooden building 42x70 feet, with basement, located on South street, for the manufacture of straw goods, hats and bonnets. Commenced business in 1865; employs 250 hands; building heated by steam.

Geo. N. Smalley occupies a two story wooden building 32x80 feet, with basement, located on Cottage street, for the manufacture of straw goods, velvet plush and felt hats. Commenced business August, 1866; employs 50 hands in the shop and 350 outside. Has a tubular boiler, with Earl's patent steam pump attached, for heating building and presses.

F. A. Brigham occupies a 2 story wooden building 24x30 feet with basement, located on Railroad Avenue, for the manufacture of sleighs; commenced business in 1866; employs 2 hands and turns out 200 sleighs per annum.

Bates, Parker & Co. occupies a 3 story wooden building 30x84 feet, located on South street, for the manufacture of straw goods; commenced business in December, 1863; employ 40 hands in the shop.

Williams & Bacon occupies a 2 story wooden building 22 x36 feet with basement and store room, located in the rear of the depot, for the manufacture of sleighs; commenced business January, 1868; employ 4 hands and turn out 200 sleighs per annum.

George B. Brigham occupies a two story wooden building 32x40 feet, with basement, located on Cottage street, for the manufacture of hand made boots. Commenced business in 1848, employs 25 hands in the shop, and lets out work to different parties. Turns out 5,000 cases per annum.

G. Cloyes occupies a two story wooden building 30x35 feet, located on South street, for the manufacture of sleighs. Commenced business in 1828, employs 3 hands, and turns out 200 sleighs annually.

John O. Brien occupies a 2 story wooden building, 20x 40 feet, located on Railroad avenue, for the manufacture of sleighs. Commenced business in 1864, employs 1 person and turns out 150 sleighs per annum.

Otis Newton & Son occupies 3 floors in 3 story brick building for the manufacture of hand made boots, business established by Mr. Newton in 1832, employs 100 hands, and turns out 100 cases per week.

J. B. Kimball & Co. occupy a 3 story wooden building 40x100 front and 80x100 rear, also a 3 story concrete building 40x80 feet front and 60 feet square, rear, for the manufacture of boots and shoes and currying leather. Employ 260 hands, and turn out 1,400 cases boots and 5,600 cases shoes per annum. The power to run their machinery is furnished by a 12 horse power steam engine, built by the At-

lantic Works, Boston, Mass. Steam supplied by a 37 horse power Harrison boiler. Have a wholesale warehouse at 107 Pearl street, Boston, Mass.

MITCHELL & HUDSON commenced business in July, 1868. They occupy a 2 story wooden building 43x60 feet, located on Cross street. Manufacture straw, velvet, plush and felt goods. Employ 50 hands in the shop and about 750 outside. Spring goods manufactured from December to June, and Fall goods vice versa. Have 16 presses for pressing velvet and felt hats. These presses are heated by gas, which is manufactured by one of the Union Portable Gas Machine made by the Union Gas Co., Boston, Mass. This machine not only furnishes gas for heating the presses, but enough for lighting the whole building. They have an upright tubular boiler of 16 horse power for generating steam for heating the building, also one Knowles patent steam pump for pumping water for the boiler, and various other purposes.

WEST BOYLSTON, 9 miles from Worcester, 37 from Nashua, a station and town on the Worcester & Nashua Railroad. The surface of the town is very pleasant, the soil good and well cultivated. The Quinepoxet and Stillwater rivers meet the Nashua, in this town. Robert B. Thomas, author of the Farmers' Almanac, resided here. The village has four churches, 1,200 inhabitants and the following manufacturing establishments.

D. C. MURDOCK, manufacturer of stop motions, established business here about the year 1833, in the small building formerly occupied by his father, Artemus Murdock, as a cabinet shop. This building having been destroyed by fire in 1868, Mr. Murdock immediately erected on its site a fine wooden building, 2 stories, 36 x 30, with engine and forge rooms attached. He employs about 3 hands, and is said to be the only manufacturer of stop motions in this country. The power is furnished by a steam engine of 6 horse power, made by G. M. & F. W. Bird, of East Boston, Mass.

GEO. F. HOWE & Co., manufacturers of boots. Established business here in 1855, under firm style of Hastings, Howe & Co. In 1859 this firm was changed to Tilton, Howe & Co., and in 1861 again changed to George F. Howe & Co. This latter firm employ upwards of 125 hands. Consume $200,000 worth in stock per year, and produce 125 cases a week. The power is furnished by a steam engine, 9 horse power, manufactured by Campbell & Whittier, Roxbury, Mass.

E. W. HOLBROOK, manufacturer of light sheetings. These mills were built by Messrs. Bigelow & Smith in 1830, for the manufacture of sheetings. About the year 1833 these mills changed hands, and the manufacturing of sheetings continued under the firm of Eldridge & Nickerson. In 1840, Mr. Nickerson having died, Mr. Holbrook associated himself with Mr. Eldridge. In 1852 Mr. Eldridge withdrew, since which time the manufacture of cot sheeting has been continued by Mr. Holbrook. Mr. H. employs 30 hands, consuming about 2,500 lbs. of cotton per week and about 30 tons of coal per year, and producing about 15,000 yards of sheeting per week. Power is furnished by a United States water wheel of 30 horse power, manufactured by Upham, of Worcester, Mass. The main factory is built of wood 35x96, 2 stories, and contains 58 looms and 2,500 spindles. Mr. H. has erected 13 fine tenements for his employees. They are of neat and tidy appearance, and contain all the modern improvements.

BEAMAN MANUFACTURING CO., incorporated 1831, with a capital of $174,000. Benj. B. Williams, President; Francis J. Parker, Treasurer; Edward Howe, Agent at works. Selling agents, Parker, Wilder & Co., Boston and New York. Manufacture corset jeans and counterpanes. Run 275 looms and 10,500 spindles; consume 780,000 lbs. cotton per annum. The machinery is run by a breast wheel, under 17 ft. fall; also, have an 80 horse power engine, made by Otis Tufts, Boston, which is not used, except in dry seasons.

WEST BROOKFIELD, situated on the Chicopee river, 69 miles from Boston, 131 from Albany, 29 from Springfield and 167 from New York, on the Boston and Albany Railroad, has a population of 1100, 2 churches. The business of the town is principally the manufacturing of boots and shoes.

SMITH & DALE commenced business in 1864, for the manufacture of boots, building, 30x70, 3 stories, employing 100 hands, making 15 to 20 cases per day.

CUMNER & MANSFIELD commenced the manufacture of ladies', misses' and children's balmoral shoes in 1866, occupy building 55x45, 2 stories, employ 20 hands, turn out 8 cases per week.

JOHN M. FALES SONS & Co., commenced business in 1868. Building 22x100, 3 stories, employ 100 hands, turn out 70 cases boots per week.

HAMMOND BROWN commenced business in 1834. Manufacturer of boots. The shop which he first occupied was 40 x 25, 1 story. He now has a building 56 x 44, 2 stories; employs 30 hands, turning out 30 cases per week.

C. H. JACKSON, manufacturer of corsets, established the business March 1st, 1866. He occupies 2 floors in a building 25x85 feet. He employs from 100 to 150 hands, manufacturing 50 dozen of corsets daily.

AT WARE, Mass., reached from the above station, is the GEO. H. GILBERT MANUFACTURING Co. This company have mills situated in Ware and Hardwick, for the manufactnre of woolen flannels. Runs 30 sets cards; employs 600 hands. Their productions are sold by Farnham, Gilbert & Co., Boston. They have a 70 horse power Corliss engine.

SMITHVILLE, reached from this station:

C. W. & J. E. SMITH, manufacturers of brown sheetings 36 inches wide. The business was commenced in 1861. They occupy a building 100x40 feet, with 2 ells 50x25 feet; run 4,356 spindles, 96 looms, using 44 reeds and 44 picks; employ 50 hands, producing about 4,000 yards goods daily, consuming 1,100 lbs. cotton. The motive power is furnished from a breast wheel 16x20, made by Thayer of Woonsocket, R. I. Ammidown, Lane & Co., selling agents, New York.

AT OAKHAM, Mass., reached from the above station, is LEWIS DEAN, manufacturer of all kinds of iron and tin plated wire sieves and coal riddles. Also, safes, iron-braced corn parchers, &c.; commenced business in 1858. The building he occupies is 36x30 feet. He employs 16 hands.

AT BARRE, reached from the above station:

JASON DESPER, business established 1841. He occupies a main building 97x36 feet, exclusive of ont buildings, containing store rooms, &c. Also 24 bleaches with a capacity for bleaching 10,000 dozen hats at once. His business consists of pressing, stamping and trimming palm leaf, straw, Leghorn and Malaga hats. He employs 19 regular hands at his manufactory, from 3 to 5 transient, and from 4 to 16 women employed at their homes in banding hats in "Perrin bands." He runs 5 sets pressing, 6 sets stamping and 41 single machines, also circular saw to cut wood, consumed under boiler. 1,000 dozen hats can be pressed and 1,000 stamped daily. A Leffel double turbine water wheel of 16 horse power runs the machinery. He also has a double cylinder steam engine of 12 horse power to be used in dry seasons.

All of the machines as well as the buildings, are heated by steam, supplied by 3 boilers of about 24 horse power, using 1,500 feet of steam pipe.

At Barre, reach from this station, is the Barre Central Cheese Co. Commenced business in 1865, for the manufacture of cheese. They occupy 2 buildings—one 100x28 feet, the other 100x18 feet, each 2 stories high, and a dry house, 80x32 feet. They employ 3 hands, produce 181,000 lbs. of cheese, and do a business of from $30,000 to $40,000 yearly.

At Barre Plains, reached from this station, is Edward Denny. Business established 1834. He occupies a building 105x45 feet, for the manufacture of flannels. He employs 50 hands, runs 5 sets machinery, and produces 1,600 yards daily. Located on Ware river. Agents in New York and Boston, Faulkner, Kimball & Co.

At Hardwick, reached from this station, is the Ware River Paper Co. Commenced the manufacture of paper hangings in 1866. They occupy a building 125 x 40 feet, with 2 L's 20x30 feet each, and produce daily 1 ton of paper; employing 15 persons and doing business to the amount of $75,000 per annum. Their machinery, consisting of 3 engines, capacity 500 lbs., 1 rotary bleacher, and one 72 inch paper machine, is driven by a water wheel, under 7 feet fall.

WEST CHELMSFORD, 5 miles from Lowell, 31 from Boston, 12 from Nashua and 12 from Groton Junction, a village of about 500 inhabitants, on the Stony Brook Railroad. Stony Brook flows through this village and furnishes motive power for the manufacturing establishments.

The main building of the Eagle Cotton Mills at West Chelmsford, is of stone, 110x60 feet and 4 stories. It contains 8 sets of machinery and gives employment to 150 hands. The daily consumption of wool is about 1,200 lbs., and the monthly production of goods about 40,000 yards. The Company, which has been established 30 years, own 5 dwelling houses, and control 17 tenements which are occupied by the operatives. J. L. Quinlan is Superintendent; and the selling agents are Parker, Wilder & Co., 4 Winthrop square, Boston.

WEST CONCORD, 22 miles from Boston and 28 from Fitchburg, a village of about 200 inhabitants in the town of Concord, on the Boston and Fitchburg Railroad.

R. Warner & Co., manufacturers of wooden ware, such as pails, tubs, buckets, &c., &c. Messrs. Warner & Co. commenced business in 1854. They have for their main factory a building 90x40, 3 stories in the rear and 2 in front; motive power furnished by a 30 horse turbine wheel; a saw mill where there stock is sawed 50x40, 1 story with a 40 horse turbine wheel for motive power. The other buildings consist of dry house 50x20, 1 story, brick, store house 85x 35, 2 story and shed 150x20. They employ 30 hands and turn out about 7,000 pails, 500 tubs and 2,000 buckets per month, besides several other articles such as strawberry boxes, keelers, &c.

American Pencil Co., S. Hayward, proprietor, commenced business about 25 years ago, half mile from depot, below Damondale mills, occupies a 2 story and L building, 36x25; employs 3 hands and turns out about 100 gross lead pencils per week. He derives his motive power from an 8 horse power Blake's iron wheel.

WENDELL, 40 miles from Fitchburg, 90 from Boston and 16 from Greenfield. A village and town on the Vermont & Massachusetts Railroad. The village contains about 100 inhabitants. The surface of the town is uneven and in some parts hilly, but the soil is strong and productive. Miller's river passes through the north part of the town. Wendell was incorporated in 1781, and named in honor of Oliver Wendell, a very worthy man, for many years President of Union Bank, in Boston, the second institution of the kind in Massachusetts.

WEST DANVERS, 16 miles from Boston, and 24 from Newburyport. A village on the Newburyport Railroad, at the junction of the Salem & Lowell Railroad.

Winona Mills, Train & Pollock, proprietors. Occupy a 3 story wooden building, 100x33 feet; machine shop, 2 stories, 25x56 feet; drug house, 15x25 feet; boiler house, 33 x 65 feet; tender shed, 20x225 feet; office, 30x50 feet; stable, 40x60 feet; blacksmith's shop, 15x20 feet; wool house, 20x 30 feet; located one-half a mile from the Railroad, for the manufacture of woolen goods, fancy cassimeres, shirtings, and flannels. The business was commenced in 1831. Employ 60 hands. Their machinery, consisting of 4 sets, is driven by a water wheel 22 feet diameter, 7 feet buckets; also a steam engine 30 horse power, with 2 flue boilers, built in their shop. They consume 600 lbs. of clean wool and turn out 400 yards of cloth per day. Do a business of $100,000 per annum.

WEST DANVERS JUNCTION, 18 miles from Lowell, and 6 from Salem, a station at the junction of the Salem & Lowell and Danvers Branch Railroad.

WEST DEERFIELD, 4 miles from Greenfield, a flag station on the Deerfield river, and on the Vermont and Massachusetts Railroad.

WEST DUDLEY, 4 miles from Southbridge, and 66 from Boston, a country village of 50 inhabitants, on the Boston, Hartford & Erie Railroad.

WESTFIELD, 93 miles from Albany, 10 from Springfield, 108 from Boston, an enterprising manufacturing village, on the Boston and Albany, and New Haven and Northampton Railroad. One of the earliest settled towns in Massachusetts; settled in 1667, and incorporated May 19th, 1669. The town of Westfield is one of singular beauty, located on Westfield river; the village lies in a valley or basin, of about 4 miles in diameter, surrounded by high hills, and is supposed to have been the bed of a lake whose waters burst the Mount Tom range of mountains and discharged itself into the Connecticut river.

There are 4 churches, 2 national and 1 savings bank. The population numbers 7,000; the streets are generally broad, straight and shaded by fine trees; the principal streets centering in a nice park, which gives the whole a nice appearance.

Rand Manufacturing Co. was established 1833, for the manufacture of whips and lashes, by J. R. Rand, and, in

the year 1864, the company was changed to Rand, Lewis & Rand. The factory is 4 stories high, is constructed of wood, and is 60x60 feet. The average number of employees is about 80. They have 25 braiding machines, and manufacture about 1,500 doz. per month.

Motive power is furnished by a 15 horse power turbine water wheel. Mr. Rand was the first in Westfield to manufacture whips. This company are largely engaged in the manufacture of hoop skirts, the business having been commenced in the year 1860. They manufacture a superior kind of hoop skirts, the advantage being, the steels are covered with sewing cotton. From 50 to 75 hands, are employed, who make, on an average, about 1,200 doz. per month. The factory is a 2 story wooden building 120x40 feet. The motive power is derived from their whip factory near by. Salesroom, 36 Murray street, New York.

Wm. Provin, manufacturer of every kind of whips and whip thongs. Mr. Provin commenced the manufacture of whips in April, 1849. The factory now used is the same building in which he commenced business and is 20x40 feet, constructed of wood and is two stories high. It is now too small for the present business, so they are to build a nice 3 story building of brick, 40x60 feet. They employ at present 7 persons and they manufacture 36 dozen per week, being sold mostly from wagons.

C. W. Spencer, manufacturer and dealer in all kinds of whips. The business was established nine years ago by Mr. Spencer, and he now uses a one story wooden building 25x45 feet, and employs 5 workmen.

Cowles & Atwater are manufacturers of every description of whips and whip thongs. The business was commenced in the Fall of 1866, by the above company. The factory is a one story wooden building 25x45 feet, 6 is the average number of employees.

Steer & Turner, builders of all kinds of church organs. This company commenced business during 1866, and are occupying a new building recently built for them of the following size 28x75 feet. It is 3 stories high, built of wood and brick. They employ 6 workmen. They derive their motive power from a six horse power engine.

Henderson & Bailey, manufacturers and dealers in whips and cigars. Messrs. Henderson & Bailey commenced business in 1862, and are now occupying a 2½ story building, 80x22 feet, constructed of wood. They employ from 15 to 18 hands, and produce annually $30,000 worth of goods.

Pratt, Atwater & Co., manufacturers of whips and thongs of every description. The business was originally established by Mr. Pratt, but in 1866 the firm was changed to Pratt, Atwater & Co. The factory is 22 x 50 feet, 2½ stories high, and is built of wood. Employ 10 workmen, and make about 25 dozen whips per week.

Shepherd, Holcomb, & Co., are engaged in manufacturing whips and thongs of every variety. The business was established 8 years ago. The building used is 20 x 40 feet, 2 stories high, and is built of wood. They employ ten hands. They manufacture $50.000 worth of these articles per year.

H. B. Smith & Co., have a large foundry and machine shop for the manufacture of Gold's Patent Sectional Low Pressure Steam Heating Apparatus, also, Dart's Combined Pipe Vise. Business was established in 1854. The foundry and machine shop is 50x120 feet, one story high, and is constructed of brick, the 2d building is used for fitting, finishing, and office, and is a 3 story brick building, 40x50 feet, the 3d building is used for storage, and is 2 stories high, built of wood and is 30x50 feet. The employees number about 50, turning out 650 tons of castings per year. A 20 horse power engine built by the American Machine Co. Springfield, and 1 tubular boiler made by Roche Brothers, Springfield, furnishes the motive power.

General Office, 706 Broadway, New York.

Darling, Smith & Co., manufacturers of Whips. Mr. Smith commenced the business about 3 years ago, having previously been engaged a number of years in this business. The new company was formed in March, 1868. They now occupy a two story wooden building, 40 x 20 feet, they employ 15 workmen, and do much of their work outside of the factory. The average amount of work per week is six gross. This company buy about as much as they manufacture.

Situated near Westfield at West Cumington, is the Hollister Paper Company, manufacturers of fine writing paper. It was established in 1866. The main building is constructed of wood and stone, is 3½ stories high and 144x32 feet. One wing, 3½ stories, 38x40 feet; one wing 32x38 feet, 3½ stories high; one wing 25x90 feet, and engine and boiler rooms 80x25 feet, 1 story each. The water power is derived from a 42 inch Ames turbine water wheel with 25 feet fall of water; also, 2 engines, one of 50 horse power, built by Woodruff & Beach, Hartford, and the other one of 20 horse power, built by Roche Brothers, Springfield. The boilers are the Harrison cast iron boilers. There is one 62 inch Fourdrinier machine and 5 engines having a total capacity of 1 ton. The amount made per day is one ton of paper. The employees number from 40 to 50. The sales room is at 95 Main street, Springfield.

The American Whip Co. was organized as a copartnership, July, 1868. They manufacture whips and cigars, and are dealers in leaf tobacco. They employ 300 hands.

W. A. Johnson. In 1845 Mr. Johnson established the manufacture of church organs. His factory is situated on Elm street, near the passenger stations of the Western & Canal Railroads. He employs over 50 men, being a larger number than are employed by any other church organ builder in the United States, and the proprietor confidently claims that his organs are unsurpassed for beauty and purity of tone, admirable and characteristic voicing, perfection and durability of action, and in general effectiveness, by those of any builder in the United States. In this claim he is sustained by the expressed judgment of many of the most accomplished experts in the country.

West Fitchburg, 52 miles from Boston, and 2 miles from Fitchburg. A station in the town of Fitchburg, on the Vermont and Massachusetts Railroad. West Fitchburg contains about 400 inhabitants. Post office address, Fitchburg. See also, Fitchburg.

Nashua river runs through the village, with its branch which flows nearly south west, giving a fine water power. Paper, woolen, mowing machines, and mowing machine knives, forms the principal manufacturing interests here.

Buckeye Mowing Machine Co. is situated here. Their factory is situated opposite the depot; they are fine two story stone buildings with French roofs.

Crawford Mills, C. J. Delehanty & Co., proprietors, commenced in 1866; established by C. J. Delehanty, in 1860 for the manufacture of fancy cassimeres. They run two mills, situated from one-half to three-quarters of a mile from depot, on the branch stream of the Nashua river. They employ 100 hands, running 6 sets woolen machinery, 30 looms, using 24,000 lbs. of wool per month, and turning out 75,000 yards $\frac{6}{4}$ goods per year.

Their No. 1 mill is situated on the hill, a 2 story and attic building 50x30, with 2 wings 30x20, two stories each; one used for cloth room, and the other for repair shop. Picker

house 20x15, one story, wool house 30x15, 2 stories. Boiler room is situated in basement of finishing room. The steam driving a 40 power horse engine, made by Putnam Machine Co., which in connection with a 50 horse power turbine wheel, furnish the motive power.

The No. 2 mill is situated under the hill, a two story and attic building 80x30, with store house 30x15, 2 stories; wool house 35x20, two stories, and dry house 50x20, one story. The motive power is furnished by a 35 horse breast wheel, and an engine to help out in dry times, made by Corliss, of Providence, 30 horse power, furnished with steam from a tubular boiler, by A. Blood, of Manchester, N. H.

A. White commenced business in 1843, for the manufacture of planing knives, paper mill bars and plates, also, general machinery. This shop is situated on the right bank of the branch river, opposite the Crawford Mill, No. 1. He employs 7 hands, his motive power is furnished from 3 breast wheels, and 2 undershot of 60 horse power combined.

Whitman & Miles Manufacturing Co. Incorporated in 1864, with a capital of $127,000. E. T. Miles, President, Augustus Whitman, Treasurer, L. K. Miles, Secretary. This company manufacture Mowing and Reaping machine knives. Their works are situated 1 mile from the depot, on the left bank of the Nashua river, and consists of main building, 180x25, 1 story and basement, used for office, store-room for finished goods, finishing room, machine shop, and in the basement for storing iron and steel. Smithy shop 150x35, 1 story, this building contains 16 hammers, driven by a 3½ feet Blake wheel, under 22 feet, head of 65 horse power. Grinding room 60x100, 1 story, containing 17 grindstones, driven by a 4 feet Blake wheel, of 90 horse power.

Hardening shop 25x50, 1 story. Tempering shop 25x70, 1 story. These shops are situated on each side of the smithy shop.

They employ 50 hands, and consume about 550,000 pounds steel and 300 tons iron and use up about 250 tons grindstone per annum.

WESTFORD, 7 miles from Lowell, 33 from Boston and 10 from Groton Junction, a village and town on the Stony Brook Railroad. The village is situated 1 mile from the depot on Stony Brook, and contains 2 churches and about 300 inhabitants. The town of Westford is a good farming district and elevated. Incorporated 1729. The surface and soil of the town are well adapted to the growth of grain, grass, fruit and large quantities of vegetables.

WEST GLOUCESTER, 31 miles from Boston and 15 from Salem, a flag station on the Beverly Branch of the Eastern Railroad.

WEST GROTON, 4 miles from Groton Junction and 39 from Boston, a station on the Peterboro' & Shirley Railroad, in the town of Groton.

WEST HANOVER, 21¼ miles from Boston, on the Hanover Branch of Old Colony and Newport Railroad. The village is about ½ mile from the depot.

WEST HINGHAM, about 16 miles from Boston, a country station on the South Shore Railroad.

WEST LYNN, 10 miles from Boston and 6 from Salem, country station on the Eastern Railroad, in the city of Lynn. See also Lynn.

Woodbury, Gray & Co., occupy a three story wooden building 80x35 feet for a manufactory, also a two story building 75x25 feet for machine work, for the manufacture of walnut and chestnut furniture of first quality, located at corner of Commercial and Curve streets. Commenced business in 1865; employ 30 hands; their machinery consists of 2 jig saws, 1 moulding machine, 5 circular saws, 1 boring machine and other machinery necessary for the business. Their machinery is run by a 30 horse power engine in building adjacent.

Bay State Milling Machine Co., Mark Healey, proprietor, occupy a 3 story brick building with basement, located on the corner of Main and Federal streets, and manufacture doors, sashes and blinds; tubs pails, kegs and other varieties of wood work. The business was commenced in August, 1868, and gives employment to 17 persons. The machinery is driven by an engine of 75 horse power, of the Corliss pattern, built by the Foundry & Machine Company, of Taunton, Mass.; supplied with steam from a flue boiler, 80 horse power, built by Daniel Lee, of Boston, Mass.

D. Taylor occupies 2 floors of a 3 story brick building 58x30 feet, located on Elm street, for the manufacture of ladies', misses' and children's shoes. Commenced business in 1856. Employs 20 hands.

W. Potter occupies a 3 story wooden building 25x60 feet at 15 Exchange street, where he manufactures ladies', misses' and children's boots and shoes; receives power from an engine 60 horse power in building adjacent. Commenced business in 1846; employs 75 hands; turns out 300 pairs of boots and shoes per day and does business amounting to $160,000 per annum.

WEST MANSFIELD, 26 miles from Boston, 17½ from Providence. A country station on the Boston & Providence Railroad.

WEST MEDFORD, 5 miles from Boston. A station in the town of Medford, on the Woburn Branch Railroad.

WEST MEDWAY, 26½ miles from Boston, 13 from Woonsocket and 29 from Providence. The village is situated ¼ mile from the station on an elevation, and has 3 churches and about 1,000 inhabitants.

L. Pierce & Co. commenced the manufacture of boots in 1867, in a 3 story building 60x35, situated near depot. Employ 50 hands and turn out 350 cases per month.

J. S. Smith & Co., manufacturers of boots, established business in 1836. The buildings are 25x30 feet. They employ 40 hands.

WESTMINSTER, 5 miles from Fitchburg, 37 from Keene, and 51 from Greenfield. A village situated about 2½ miles from Westminster station, in the town of Westminster, on the Vermont & Massachusetts Railroad. The village has 3 churches and about 350 inhabitants. The town of Westminster lies on the range of highlands which separate the waters of the Con-

necticut and Merrimac. From the village a prospect is presented of lake and mountain, with all the varied scenery which renders a New England town delightful.

WEST NEWTON, 9 miles from Boston and 35 from Worcester. A village on the Boston and Albany Railroad, in the town of Newton. This town is a very beautiful agricultural town as well as for manufacturing. It is watered by the Charles river. The soil is generally good. The town was incorporated in 1691. This town has seven villages, Newton Corner, Newtonville, West Newton, Auburndale, Newton Upper Falls, Newton Lower Falls and Newton Centre.

WESTON, 13 miles from Boston and 37 from Fitchburg. A village and town on the Boston and Fitchburg Railroad. This is a township of good land, with a neat and flourishing village. Incorporated 1712.

WEST ROXBURY, 7¼ miles from Boston, on the Dedham Branch, in a town by the same name. A small village containing one manufactory.

WEST SANDWICH. A village of 250 inhabitants, situated 60 miles from Boston, and 19¼ from Hyannis, on the Cape Cod Railroad.

WEST SPRINGFIELD, 2 miles from Springfield, 100 from Boston, and 101 from Albany, on the Boston & Albany Railroad. The town has two villages, Mattineaque and Agawam. The town is beautifully situated on both sides of Westfield river, at its confluence with the Connecticut, opposite Springfield, with which it is connected by a bridge. Some parts of the town are rough and hilly, but the general character of the town in regard to soil is alluvial meadow, bearing good crops. Delightful scenery is exhibited on the summits of the hills and along the rivers. The village of Mattineaque is situated near the depot of West Springfield, and has a population of about 1,200 and one church.

AGAWAM CANAL CO., incorporated in 1847. W. K. Baker, Treasurer, C. W. Chapin, President, Wm. Melcher Agent. Manufacturers of sheetings and drillings. They have a 5 story and attic building 200x60 with 2 ells, west ell 71x60, 3 stories and attic, east ell 30x60, 3 stories and attic, on the south of main building. A tower used as sink rooms, for the 5 stories 13x17, on the north. The tower entrance to the mill is also 13x17. This company run 19,500 spindles, 440 looms, employing 400 persons, using on an average 70 bales cotton per week, or about 32,000 lbs., turning out finished goods, 100,000 yards per week. Motive power furnished from two turbine wheels, situated in the L's part, of 425 horse power combined. The office building is 131x30, 2 stories, the basement being used for the furnace for heating. A cotton house attached to this building is 69x30, 1 story.

THE SOUTHWORTH MANUFACTURING CO. was incorporated in 1839. The capital now is $100,000. Wells Southworth, President, Edward Southworth, Treasurer, and H. W. and G. C. S. Southworth, Agents. This company manufacture writing and ledger paper. The main building is 150x45 feet, 3 stories; also, have 2 stock houses 25x25 and 25x50 feet, 1½ stories each. Employ 85 hands, and turn out about 7 tons paper per week. The motive power is from 4 turbine wheels of 100 horse power combined. They have 2 locomotive boilers, made by Roche Brothers, for heating the works.

AGAWAM PAPER CO., incorporated in 1859 with a capital of $50,000, for the manufacture of writing and ledger paper. This company's mill is situated nearly opposite West Springfield depot. Their main building is 45x90 feet, 4 stories with machine room attached 25x75 feet, 2 stories. This company employ 60 hands, and manufacture about 6 tons paper per week, using about 7 tons rags. Motive power derived from a 65 horse turbine wheel, with a 10 horse turbine wheel for driving machine. The officers of the company are E. Trask, President, Geo. L. Wright, Treasurer and Agent.

WEST STOCKBRIDGE, situated on the branch of the Housatonic River Railroad from Van Deusenville to the State line, 165 miles from Boston and 41 from Albany, and has a population of about 250.

WEST TOWNSEND, 11 miles from Groton Junction and 46 from Boston. A station in the town of Townsend, on the Peterboro' and Shirley Railroad.

WEST WAREHAM, or Tremont Station, situated 11 miles from Middleboro', 34 from Hyannis and 15 from Fairhaven, on the Cape Cod Railroad. Here a road branches off for Fairhaven and New Bedford, called the Fairhaven Branch. The village contains about 250 inhabitants.

WEST WARREN, a station between Warren and Brimfield, on the Boston and Albany Railroad, 75 miles from Boston, 125 from Albany and 23 from Springfield. A village of about 700 inhabitants, and 1 church, situated on the Quabaug river.

N. RICHARDSON & CO. commenced business in 1865, occupying a 2 story building for the manufacture of tape 100x44, running 21 looms, employing 25 hands. The capacity of their works is from 80 to 100 gross per day. The motive power is furnished by a 50 horse power turbine wheel; for heating they have a tubular boiler made by Stewart & Dillon of Worcester.

WEYMOUTH, about 11 miles from Boston, on the South Shore Railroad. The station is in a town by the same name. This was the second settlement made by white men in New England. The town was formerly noted for its excellent dairies, particularly for its cheese of superior richness and flavor, but little of which is now made in consequence of the increased value of the lands. This ancient town has been the birth place and residence of many men of great usefulness in society. Among the number the name of Cotton Tufts, M. D., will long be remembered as a revolutionary patriarch and skillful physician.

WHATELY, 26 miles from Springfield 10 from Greenfield. A village and town on the Connecticut River Railroad, and on the west

side of the Connecticut river. The town was incorporated in 1771. The soil is good. The village contains about 300 inhabitants.

WHITIN'S STATION, 26¼ miles from Providence and 16¾ miles from Worcester, is the railroad connection of Whitinsville, situated up the valley of the Mumford river, about two miles west of the station. It is also the centre of the village of Linwood, which derives its name from the Linwood mill.

This mill was built in 1866; it is of brick, four stories in height, and is 166x66, surmounted by a French roof. They run 10,000 spindles and 210 looms, consuming about 750 bales of cotton, and producing 12,000,000 yards of fine sheetings per annum. The mill is owned and operated by CHAS. P. and JAMES F. WHITIN, under the name of Whitin Bros. It is situated on the Mumford river, the power being obtained from the same by the use of a Jonval turbine wheel; the fall being about 12 feet. They employ about 200 hands who occupy the houses which constitute the village.

B. J. BLANCHARD, who is an extensive dealer in granite, has his yard near the depot. He employs about 35 men and commenced business in 1866.

WHITINSVILLE. An enterprising village, situated about 2 miles from Whitin's Station. The village contains about 3,000 inhabitants; has two churches—1 Congregational, 1 Methodist—and a high school. The enterprise and progress of this village are due to the enterprise and energy combined, with the untiring industry of Paul Whitin & Sons, who have accumulated quite a fortune.

HERE is situated the celebrated machine shops of JOHN C. WHITIN, who is the patentee and manufacturer of the Whitin Picker. He also makes openers, lappers, cards, railway heads, drawing frames, slubbers, fly frames, ring spinning frames, spoolers, warpers, dressers and looms. He occupies two large brick buildings. The one built in 1827, is 306 feet by 102 wide, 3 stories, and one built in 1865, 483 feet long by 68 feet wide, 3 stories with basement. Connected with it, is an extensive foundry, forging and carpenter shops. He employs about 550 hands. The shops are situated on the Mumford river, from which the power is derived. The business was commenced by P. Whitin & Son, but in 1864, passed into the hands of John C. Whitin.

THERE is also in the village a large cotton mill built in 1847, by P. WHITIN & SONS, who commenced the manufacture of cotton goods in 1826. The mill is built of stone and is 48x265 feet, 4 stories in height. They run 12,000 spindles and 256 looms, consume 1,000 bales of cotton and produce 1,800,000 yard cloth per annum, using No. 35 yarn. They employ about 250 hands. This mill is also situated on Mumford river and is run by a Boyden turbine water wheel, the fall being 17 feet. The business is now carried on by Charles P. Whitin & Sons.

WHITTENDON, 1¼ miles from Taunton depot, and 9 from Mansfield, a country station on the Taunton branch, in the city limits of Taunton. (See Taunton.)

WILBRAHAM. The village is situated about 2 miles from depot, on the Chicopee river, and has a population of about 400, and three churches. A station on the Boston & Albany Railroad, 89 miles from Boston and 111 from Albany. The people of this pleasant town are principally employed in agricultural pursuits, and are remarkable for equality of property. The town is watered by the Chicopee and several small tributaries. Surface is hilly, and the soil is well adapted to farming.

ELLIS MILLS. This firm was established in 1865. They occupy one 3 story building, 32x82 feet, with an L 24x62 feet, 2 stories. Manufacture doeskins and cassimeres, employ 40 hands, run two sets machinery, produce 500 yards daily, and do a business of about $135,000 annually. Their power is furnished by a water wheel under 22 feet fall, from 12 mile brook emptying into Chicopee river; assisted by a 30 horse power engine made by S. C. Chubbuck & Sons. Their Agents in New York and Boston are Stanfield Wentworth, and Hazelhurst & Brother.

WILLIAMSBURG, 7½ miles from Northampton, and 24½ from Springfield. Situated at the terminus of the Williamsburg branch of the New Haven and Northampton Railroad. The town of Williamsburg was incorporated in 1771. The surface is elevated and uneven, but pleasant with a fertile soil. It is watered by a good stream which meets the Connecticut at Northampton. The village contains 2 churches and about 2500 inhabitants.

H. L. JANES is engaged in the manufacture of doeskins. The business was commenced some 20 years ago by Lewis Boardman & Co. and bought out by Mr. Janes in October, 1868. The main building is of wood 38x70 feet, and is 3½ stories high, the first floor being used as a store. The employees are 40 in number, and run 20 looms and 600 spindles. From 1,800 to 2,000 lbs. of stock are used per week. One breast wheel, 18 feet in diameter, is used, which is soon to be exchanged for a turbine wheel. Mr. Janes is also the owner of a cotton mill, a mile and a half from West Whately, (nearest station West Hatfield, on Connecticut River Railroad.) The mill was started about 15 years ago, but was taken by Mr. Janes about 12 year ago. The mill is a 3 story wooden building 34x120 feet. The amount of stock used per day is 250 lbs. Motive power is derived from 1 Leffel turbine wheel of 25 horse power. Have also 1 upright tubular boiler, made by Pitkin Bros., Hartford.

GRAVES, LAMB & LYMAN, manufacturers of white and colored cotton warps, also, skein yarn, from 10 to 40, of all colors. The business was commenced in January, 1868, by Doland, Lyman & Co., and November 1st, 1868, the company was changed to Graves, Lamb & Lyman. The factory is built of wood, 3 stories and is 33x60 feet, with one ell 25x35 feet, two stories also of wood and brick basement. Number of employees about 20. About 5 bales of cotton are used per week. A 25 horse-power engine is used when short of water, Roche Bros. builder of engine. There are two boilers in use, one tubular and one flue.

WILLIAMSTOWN, 43 miles from Troy and 5 from North Adams. A village and town on the Troy & Boston Railroad. The village is situated on an elevated plain and contains a population of 1,100 and 3 churches.

WILLIAMS COLLEGE is located here. It derived its name from Colonel Ephraim Williams, a native of Newton and a distinguished benefactor. The nucleus of the college, a free grammar school was established in 1791. And in 1793 the legislature vested it with college privileges, and is now endowed with $75,000.

THE WILLIAMSTOWN MANUFACTURING CO., incorporated in 1866, capital $300,000. Harvey Arnold, President; S.

Southworth, Treasurer. Manufacturers of 64x64 print goods. The main building is 268x65, 4 stories, building attached, picker and dresser house 60x50. The first floor of the main building is used as a machine shop and engine room, the engine made by Wm. Harris of Providence of 100 horse power, with 2 turbine wheels, 6 feet diameter, 13 feet fall of 80 horse power each, furnish the motive power. They have 3 tubular boilers. They run 300 looms, 16,048 spindles and employ 185 hands. They use about 10,000 lbs. cotton and turn out 67,500 yards cloth per week.

STEPHEN WALLEY, commenced business in 1866, in a four story building 120x36, L 30x50, for the manufacture of print goods 56x60. He runs 100 looms, 3,900 spindles, employs 75 hands and turns out about 100,000 yards cloth per week. The motive power is furnished by a 75 horse power overshot wheel 16 feet diameter, 16 feet bucket.

WILLIMANSETT, 7 miles from Springfield; a station in the town of Chicopee on the Connecticut River Railroad, and on the Connecticut river.

WILLOW BRIDGE, 3½ miles from Boston. A station on the Woburn Branch Railroad.

WILMINGTON, 15 miles from Boston, on the Boston and Maine Railroad. The surface of this town is generally level, with a light and sandy soil, watered by a branch of Ipswich river. The town was incorporated in 1730.

The Nashua and Lowell Railroad also passes through this town.

WILMINGTON JUNCTION, 18 miles from Boston, 7 miles from Lawrence, and 9 from Lowell. A station on the Boston & Maine Railroad, and at the junction of the Salem & Lowell Railroad with the former road. This station is located in the town of Wilmington.

WINCHENDON, 68 miles from Boston, 18 from Fitchburg and 24 from Keene. A village on the Cheshire Railroad, in the town of Winchendon. The village contains 1500 inhabitants, 5 churches and 1 National Bank. The town was incorporated in 1764. The surface is uneven and rocky, with a strong soil. Miller's river rises in this town and Ashburnham.

MANUFACTURES.

E. MURDOCK & Co. In 1834 Elisha Murdock conceived a plan, and carried it into operation, whereby the labor of making wooden ware would be greatly decreased, and at the same time lessen the expense.

The manufacturing of wooden ware was established in Winchenden, as long ago as 1820. The manufacturers having their staves, for pails, got out by hand labor, but about 1841 or 2 Mr. Murdock drew a plan of a machine to do this kind of work, getting his brother William, a machinist, to make his machine, the people of Winchendon, prophesied it would be a failure, but the Murdock's having the true "yankee pluck and ingennity," got out their first machine, which has since with its several improvements, proved so valuable.

At the time of commencing, Mr. M. employed 3 hands, but his business steadily increased.

In 1860, he took William W. Whitney, his son-in-law into partnership with him, and in 1862 a new arrangement was made, by which Mr. Murdock, retired from the firm, and James Whitman became a partner. The business being done under the name of E. Murdock & Co.

This establishment has grown from one of the smallest, to the largest company in the world, (one other company only selling a larger amount of goods, partly manufactured by themselves, and part of the productions of others.)

Their works are situated in the pleasant village of Waterville, one mile from the depot, on the Miller's river, where they have 4 mills, the size and dimensions are as follows: Their pail factory which comes first is a 2 story brick building 180x60, with a capacity for turning out 200 dozen pails per day. Paint shop where goods are finished and packed 80x30, 3 stories. The motive power at this works is furnished from 1 Leffel turbine 3 feet wheel and a 4 feet Warren wheel, under 16 feet head of 110 horse power combined. Their steam works with a 40 horse power tubular boiler, built by Corliss Engine Co., has a circulation of 15,000 feet pipes for steaming stock. This boiler also furnishes steam for heating the mills.

The dimensions of their five store houses, for storage of stock, raw and in process, are as follows:—No. 1, 144x30, 2 floors; No. 2, 120x30, 2 floors; No. 3, 100x24, 2 floors; No. 4, 100x24, 2 floors; No. 5, 35x28, 2 floors.

Their next mill is the tub works and saw mill. The tub factory is 100x30, 3 stories, and has a capacity of producing 300 tubs, 20 dozen churns, and 50 dozen zinc boards per day. At right angles, joining, is their saw mill 60x35, 2 stories, used for cutting out stock. The motive power is furnished from one 4 ft. Andinson and one 4 ft. Warren wheel, 12 feet head, of 60 horse power; and, in saw mill, a 3 ft. Worcester wheel of 20 horse power.

Across the street, is their planing mill, where bottoms of tubs and pails are made. This mill is driven by a 3½ feet Warren wheel 20 horse power.

They employ 80 persons, and use, on an average, 4,000 cords pine lumber, or 3,000,000 feet over, board measure, hiring 10 saw mills to prepare the stock.

C. A. LOUD commenced the manufacture of faucets in 1857. The business was established by his father about 1800. Mr. Loud occupies a 2 story building 20x40 feet, situated in rear of B. D. Whitney's machine shop. Employs 6 hands; derives his motive power from a 20 horse turbine wheel.

Q. S. BACKUS commenced business on Front street, in 1868, for the manufacture of small bench vises, and does a general machinist's business. He occupies a building 30x40 feet, 1 story; employing 20 hands. His machinery consists of 3 engine lathes, 3 milling machines, 1 index milling machine, upright drill, speed lathe, screw machine and edging machine; turning out 3 dozen 1½ inch and six 4 inch vises per day. Mr. Backus has lately invented a new arrangement, to take the place partly of a clothes horse. It is very handy, consists of 8 bars or slats on a bracket, made to hang anywhere.

KETCHUM & LOUD commenced business in 1868, for the manufacture of Ketchum's patent double bladed and drawing stroke mincing knives, occupy a room in 3d floor, in a building situated on Water street, near the tannery. They employ 3 hands. Their motive power is furnished with the room, leased of E. Murdock, Jr.

NELSON & RICE commenced business in 1865 for the manufacture of upper leather for boots and shoes. The business was established by Isaac Morse, about 50 years ago. They occupy a building 130x24 feet, 3 stories, situated

on the right bank of the Miller's river, on Water street. Their bark house is 40x50 feet, with a capacity for storing 200 cords. The boiler for heating the building is situated in the main building, a flue boiler built by "Unknown." They employ 10 hands, and produce about 9,000 hides per annum. Their motive power is furnished by a $3\frac{1}{2}$ feet turbine wheel under 9 feet fall, of 15 horse power.

B. D. Whitney commenced business about 30 years ago, for the manufacture of wooden ware machinery. His works are situated on Mechanic street, and consists of main building or machine shop, 100x40, three stories, ell 50x40, one story; foundry, 100x40, one story; a building where they manufacture circular saws, 120x30, one story; forge shop, 50x30, one story.

He employs 70 hands, and does a business of about $100,000 per year. His motive power is furnished from two turbine wheels of 60 horse power combined.

Goodspeed & Wyman commenced business in 1850, for the manufacture of tub, pail and chair machinery. In the fall of 1868 they were burnt out, but commenced immediately to rebuild. Their new works are situated on nearly the same site, as the old establishment. Their main building is 100x46, two stories, used for machine shop; forge shop, 30x50, one story: office and japanning building, 25x40, one story. They employ 50 hands, and turn out from 10 to 15 set tub and pail machinery, per year. The motive power is furnished from a 3 ft. turbine wheel of 25 horse power.

M. H. Pulks & Bro. occupy a three story building 80x45 feet, for the manufacture of bobbins and spools. The power is supplied by a 60 horse power engine. They employ from 25 to 40 hands, consume 800,000 feet stock per annum, and produce daily from 10,000 to 25,000 bobbins and spools.

Woodcock & Sawyer, manufacturers of wooden ware. They commenced this business some 15 years since, and occupy two buildings, one 24x80 feet, 2 stories, with basement, the other 26x88 feet, 2 stories high, with basement, besides storehouses and smaller buildings. They employ 45 hands, producing 1,500 pails daily. Water power is used, as they are situated on Miller's, one of the best rivers in the State for power.

O. Hancock, manufacturer of all kinds of pail ears. He occupies two buildings, one 24x14 feet, the other 24x17$\frac{1}{2}$ feet, one story each. He uses machines, turning out about 3,000,000 pieces yearly, amounting to about $5.000.

Orlando Mason, manufacturer of wooden ware, pails, sugar, salt, and fruit boxes, &c. &c., occupies a building 24x72 feet, two stories, one 24x60 feet, three stories, another 50x24 feet, two stories, with saw mill and store house situated about two miles from the railroad station. The business was established by Kendall & Mason, in 1853, and now gives employment to from 60 to 70 persons, and doing a business of from $50.000 to $60.000 per annum. The machinery is driven by water power.

Winchester, 8 miles from Boston and 18 from Lowell. A village and town of about 3,000 population, situated on the Boston and Lowell Railroad, and at the junction of this road with the Woburn Branch. Wiuchester previous to the year 1850, was a part of Woburn, Medford and West Cambridge. It has 3 churches and 10 schools, 1 high, 1 grammar and 8 mixed.

MANUFACTURERS.

C. Batchelder commenced the currying of leather in 1866, occupies a part of building owned by Joel Whitney, machinist. Mr. B. employs 12 hands and turns out some 3,000 lbs. finished leather, per week.

L. & A. Elliott are manufacturers of piano-forte actions. Commencing the business in 1867. They occupy room in Whitney's Building; employ 4 hands, turning out on an average 15 sets actious weekly. The power is furnished by Joel Whitney.

Cowdery, Cobb, Nichols & Co., manufacturers of grand and square piano forte cases. The business was commenced by Messrs. Church & Lane in 1848, and continued until 1865, when they were succeeded by the present company.

They occupy 3 buildings, covering about 7,000 square feet of ground for their factory. Also, have 2 dry houses and lumber shed, &c. Employ 30 hands and generally turn out about 1,000 cases per year. Their machinery is driven by a breast wheel 12x12 feet.

Joel Whitney commenced the machinist and machinery business in 1844. He occupies part of a 2 story building, 100x40 feet, renting room and power to C. Batchelder and L. and A. Elliott. Employs 12 hands, making a specialty in the manufacture of tanners and curriers' machines. His machinery is driven by a 25 horse turbine and Blake wheel.

Clark & Smith, dealers in mahogany and other foreign and domestic woods. The principal business of this firm is the sawing of logs into boards for furniture manufacturers and sawing veneers. The business was established in 1840. This firm commenced in 1867. Their mill building is 40x80 feet, situated about $\frac{1}{4}$ mile from the depot. They employ 11 hands. Their machinery is driven by an 80 horse power engine, with tubular boiler, built by Dobbin & Crawford of Lowell.

Boston Button Co. In 1867, this company commenced the manufacture of silk and velvet buttons, occupying a 2 story building, 60x20 feet. They employ 50 hands, run 12 button machines, patented by Mr. W. W. Wade, the Superintendent and Agent. The motive power is furnished by Joel Whitney.

Alexander Moseley occupies a tannery and beam house 140x18 feet, containing 150 vats, with an L 40x60 feet, 1 story; a bark mill 40x10 feet, 1 story, with nine 4 cord leeches under flat roof, connected; a brick fire proof engine and boiler house 40x60 feet, one story, currying shop 137x38, 3 stories, a storehouse 100x45 feet, $1\frac{1}{2}$ stories, with yard room, etc., covering an area of 11 acres of ground, for the manufacture of leather. The business has been carried on at this location since September, 1865, and gives employment to 110 persons, turning out each week 1,500 sides of finished leather, and consuming the equivalent of 60 cords of bark per week, one-half of which is Miller's bark extract, manufactured by W. E. Plummer, 66 Congress street, Boston. Their machinery is driven by an engine of 40 horse power, built by the Corliss Steam Engine Co. of Providence, R. I., with two tubular boilers, 100 horse power combined, built by Alleu & Endicott, of Cambridgeport, Mass., which, in addition to furnishing steam for the engine, supplies steam for heating all the buildings, which passes through 3,376 feet of 2 inch pipe. The buildings are all lighted by gas generated by one of O. P. Drake's automatic gas machines, which furnishes gas for 150 burners. Water is also conducted to all parts of the buildiug, there being stationed in each room a fountain and drinking cup. The business amounts to $500,000 per annum. Office and salesroom, No. 50 High street, Boston, Mass.

Leonard Nutter commenced business in 1857, on Main street, where he occupies a 3 story frame building, 35x60 for the currying of leather. Tan shed and coal house, 30x20, 1 story, employ 10 hands, turning out on an average 2 tons split leather per day. The motive power is furnished from an 8 horse upright engine, furnished with steam from

an upright tubular boiler, made by Tufts' of East Boston. Consume 75 tons coal, 160 barrels of oil, 125 barrels tallow, and 10 to 12 tons gambia per year.

Warren Johnson, currier and finisher of upper leather for boots and shoes, commenced business in 1868.

The business was established by Warren & Johnson, in 1855, on Walnut street, ¼ mile from the depot. Mr. Johnson, occupies a 2½ story building, 60x25, employs 9 hands, consumes 40 barrels oil, 30 barrels tallow, and 40 bags gambia per year, and finishes about 7000 sides leather.

The motive power is furnished from 8 horse engine, made by James Bull of Woburn Centre, steam furnished from an upright tubular boiler, made by Cunningham of Charlestown.

WINSLOW'S STATION, situated in the village of South Dedham, for the accommodation of the Western part of the village. 15½ miles from Boston. A freight station on the Boston, Hartford and Erie Railroad.

George H. Morrill. Among the largest and oldest manufacturers of printers ink, is George H. Morrill. Upwards of 25 years ago, Mr. Samuel Morrill established this manufactory, which has since grown to be the largest ink manufactory in the country, there being made 7 tons and upwards per week. The main building where the grinding is performed is wooden, 2½ stories high and 25x40 feet, next is the engine building which is constructed of brick and 20x36 feet; 1st black house which is used for making the black, commonly known as lamp black. The building is 44x20 feet. The office is 16 feet square and the varnish house is 40x30 feet, part of this latter building is 2 stories. They use 10 kettles, 2 having a capacity of from 200 to 1,200 gallons each, and one of 800 gallons, and 3 mixers for 1,600 lbs. ink each. The black house which is built of brick is 76x26 feet, and required 207,000 bricks in its construction; next is the receiving house, used for receiving the black from the furnaces, it being brick and 30x16 feet.

Next in order are the furnaces, which are built of brick, being 64x18 feet; 2 round houses, built of brick, being 19½ feet diameter and 20 feet high. Next to this there is another black house 20x60 feet; then the third round house 19½ feet diameter, 20 feet high. Following this, is one brick building 18x26 feet. Then comes the last black house, which is 20 feet square. There are 5 tanks that hold from 13,000 to 20,000 gallons. In the refining house, used for refining oils, the building being 40x30 feet, there are 2 refiners, weighing 6 tons; also 2 tanks weighing 3 tons, and one large receiver with a capacity of 1,400 gallons. Lastly, comes the storehouse, which is 40x80 feet. The number of employees at present is only 10. They consume 400 lbs. of black for ink and make about 7 tons of ink weekly. One 30 horse steam engine, with 1 tubular boiler, and 1 of Rider's 35 horse power turbine wheels, 6 feet in diameter, furnish the motive power. Office is located at 22 Congress street, Boston.

WINTER HILL, 2 miles from Boston. A small station on the Woburn Branch Railroad.

WOBURN, formerly called Charlestown Village, was settled in 1640, and incorporated as Woburn, in 1642; has 20 schools—1 high, 1 grammar, 7 intermediate, 9 primary, and 2 mixed. Churches as follows: 1 Baptist, 1 Congregationalist, at No. Woburn, 1 Methodist Episcopal, Woburn Centre, 1 Catholic; New Jerusalem Society, worship at Engine House Hall, East Woburn. Two banks, 1 savings bank.

Contains three villages—North Woburn, situated one mile from depot on Lowell Railroad; East Woburn, on the Stoneham Branch; and Woburn Centre, situated at the head of Woburn Branch. Woburn contained in 1865, 7,002 inhabitants, and 1,385 voters. Number of acres of land, 7750.

MANUFACTURERS.

John Cummings, Jr. & Co., manufacturer of upper leather; commenced business in 1866. They occupy a four story wooden building, with a brick basement, 50x150 feet, used as a currying shop; a tannery, one story, 45x200 feet, built of stone and brick; a stone bark mill, two stories, 20x30 ft.; a store house, 1½ stories, 30x100 feet, and a one story, fireproof engine house, with arched roof, built of brick, 20x90 feet, located in Cummingsville, in the town of Woburn, Mass.

This business was established about 1833 or 34, by deacon John Cummings, of Woburn. The present firm employ about 150 hands, and tan and curry about 30,000 hides, and 25,000 to 30,000 calf skins per year. Their machinery, which is of the most complete and improved kind, is driven by an engine of 45 horse power, built by the Putnam Machine Co., of Fitchburg, Mass., with two tubular boilers, of 45 horse power each, built by Allen & Endicott, of Cambridgeport, Mass. This is probably the most extensive establishment of the kind in the State, if not in the country. The buildings are all heated by steam, for which purpose many thousand feet of pipe are used. Office and salesroom, No. 93 Pearl street, Boston, Mass.

J. Skinner & Co. occupy a 3 story wooden building 35x80 feet, located on Chestnut street. Also, a 2 story wooden building 35x100 feet, rear the depot, for the manufacture of patent, calf, buff, kip, and split leather. They employ about 50 hands, turn out about 30,000 calf skins, and about 55,000 sides of leather per year, and do a business amounting to about $225,000. Their machinery is run by 2 engines; one of 12, the other 10 horse power, with a flue boiler, 20 horse power, and a tubular boiler 12 horse power.

John Bacon & Co. occupy a 3 story wooden building 45 x68 feet; a 2 story wooden building 28 x 68 feet, with out buildings used as beam houses, store houses, lime houses, &c., the whole covering an area of about 3 acres, located at Cummingsville, in the town of Woburn, for the manufacture of patent, grain, buff and split leather. They commenced business in 1852; employ 100 hands; have capacity for turning out 20,000 sides of patent, and 30,000 sides of other sorts of leather per year. Business amounts to about $200,000 per year. Steam power is supplied by an engine of 20 horse power, built by Otis Tufts, of East Boston, Mass., with 2 tubular boilers of 25 horse power each, built by Thos. Cunningham, of Charlestown, Mass. Office and salesroom, No. 140 Pearl street, Boston, Mass.

Linnell, Cummings & Co. occupy a three story wooden building, 32x90 feet, near the depot, for the manufacture of buff, grain, pebble, and split leather. They employ 35 hands and turn out about 20,000 sides per year, worth about $150,000. Their machinery is driven by an engnie of 12 horse power, built by James Buell, of Wobun, with a tubular boiler of 15 horse power, built by Pratt & Co., of East Boston, Mass. Office, No. 8 Bath street, Boston, Mass.

Claffy & Hayes, occupy a 3 story wooden building, 30x38 feet, located at Woburn Centre, for the manufacture of leather. They employ 9 hands, turn out about 10,000 sides per year, and do business to the amount of $65.000. Commenced business in 1865. The machinery is run by an engine of 8 horse power, built by Butter & Son, of Woburn,

Mass., with a tubular engine of 8 horse power, built by Campbell & Whittier, of Roxbury, Mass.

H. Munroe, occupies a 3 story wooden building, 40x40 feet, located at Woburn Centre, for the manufacture of leather. He commenced business in 1838. Employs 10 hands, and turns out about 10,000 sides per year, worth about $60,000. Motive power is supplied by an engine of 8 horse power, with a tubular boiler of 8 horse power, built by Hittinger, Cooke & Co., of Charlestown, Mass.

W. Fox occupies a 2 story wooden building 18x50 feet, with an ell 16x23 feet, located on Bedford street, for the manufacture of grain leather. Mr. Fox commenced business in 1827. He employs 5 hands, turns out about 6,000 sides per year, and does business amounting to $40,000. The machinery is run by an engine of 7 horse power with a tubular boiler of 15 horse power.

P. E. Bancroft occupies a shop on Franklin street, for the manufacture of gentlemen's shoes and slippers. He commenced business in 1864. Employs about 25 hands and does business to the amount of $16,000 per year.

Burr & Munday, manufacturers of ladies' machine and hand sewed boots. Commenced business Jan. 1st, 1869, and give employment to 20 hands.

N. J. Simonds, manufacturer of shoe stock, consisting of inner soleings, stiffenings, heelings, heels, &c. The business was established by S. Simmons & Son in 1862. The building, which is situated on Main street, is 4 stories high, and 70x50 feet. It is the next building south of the depot, Woburn, Mass. The average number of employees is 140. They use 6 rolling and splitting machines, 5 cutting machines; also machinery for hoisting, making paste, skiving, packing, &c.; consuming about 600 tons of shoulders, trimmings, skiffings, &c., 2,000 bush. of skivings, and 6,000 bbls. of flour per annum, producing about 2,000,000 pairs of inner soles, 1,000,000 pairs of stiffenings, 600,000 pairs of heels, and 125,000 sheets of heeling. The motive power is furnished by a 30 horse power engine and 2 tubular boilers of 60 horse power, made in East Boston. Keep 7 horses constantly employed collecting and delivering stock. The stock is taken in on first floor and sorted; each kind of leather going into a particular place. It is then taken to the cutters, thence to be pasted; afterwards, to the ovens to be dried by the heat of steam pipes, and then it is rolled, finished and packed.

Woburn Centre, 10 miles from Boston, the principal village of the town of Woburn, at the terminus of the Woburn branch. The village is delightfully situated on elevated ground, contains 7 or 8 churches, a bank, newspaper and Warren Academy, founded in 1828.

MANUFACTURERS.

J. H. Connolly & Co., commenced the business of currying leather for boots and shoes, in 1869. They occupy a 3 story building, 40x30 situated near Main street, rear of Salem street. They employ 13 hands, and consume 3½ tons gambia per year, and 2 barrels oil, and 5 barrels tallow per week.

The motive power is furnished from a 6 horse power engine, built by Osborne, of East Boston, furnished with steam from a tubular boiler by E. Hodges & Co., of East Boston. This firm produce 200 sides and about 1000 lbs. splits per week.

M. T. Allen, Agent, commenced in 1868, to manufacture shoe stock, such as inner soles, heeling, stiffening, counters and heels, occupying rooms in a 2 story building, situated on Main street, below the Common. Employs 14 hands and produces 1,000 lbs. sole and heel leather per week.

James Buel, machinist and machine manufacturer, steam engines, &c., &c. Commenced business in 1864, on Main street, opposite of Common, where he occupies a 2 story building and basement 45x30, with boiler house attached 10 x20, 1 story. He employs 10 hands. His machinery is driven by a 10 horse power upright engine, built by himself, furnished with steam from a tubular boiler, made by Cunningham of Charlestown. Mr. Buel's principal business is building and repairing machinery for tanners and curriers use. He has lately began to manufacture "the new two and three wheel machine called velocipede," and invented a three wheel velocipede—designed for the use of ladies.

Trowan & Widgery, curriers and finishers of boot and shoe leather. This firm commenced business in 1868, occupying a 3 story building 36 x 40, situated on Flag's court. They employ 10 hands. For re-tanning they use a portable vat. This, with their other machinery, is driven by a 6 horse power engine, builder unknown, furnished with steam from a tubular boiler. This firm produces, on an average, 10,000 sides and 60,000 lbs. splits per year; consuming 3 tons gambia, 90 barrels of oil, and 60 barrels tallow yearly.

Grammer Bros. commenced, in 1844, to manufacture custom made ladies' and gents' boots and shoes. They commenced in a small way and built up a lucrative business by their forethought and skill. They give employment to 50 persons, producing 500 pairs shoes per week. They occupy a building 30x35, 2 stories, situated on Warren street, near Pleasant street.

Luke R. Tidd, in 1847, commenced the manufacture of ladies' slippers, for the Boston retail trade. His shop, 15 x 15, 1½ stories, is situated on Salem street, about 1 mile from Main street. He employs 5 hands, and turns out, on an average, 5,000 pairs slippers per year.

John Tidd & Son commenced the manufacture of ladies', misses' and children's boots and shoes, in 1830. They occupy a 3 story building 100x60 feet. situated on Main street, corner of Salem street, where they employ 60 hands, 20 being females. The stitching of the shoes are all done by machines. On the first floor they have 15 of these machines, run by as many females. This establishment turns out 250 pairs shoes per day.

J. B. Winn & Co., in 1842 commenced the manufacture of leather, occupying 1 or 2 small buildings on Salem street. They have since increased their business and now occupy buildings covering, with their yard room, about 8 acres. Their main building 60x40 feet, 3 stories, is used for finishing leather, &c., attached to the main building is a wing 130x28 feet, 3 stories; beam house 115x30 feet, 1 story. In this building are 21 lime pits, 10 drenches, 6 soaks, with capacity of holding 600 hides. L to beam room 50x25 feet, 1 story, used for storing hides. Tan house 35x100 feet, 18 feet posts; capacity for holding 500 cords bark. Bark grinding house 40x40 feet, 1 story, containing 2 mills, grinding 2 cords of bark per hour. The bark is conducted to the leachers through troughs. They have 8 leachers 8 feet square, holding 5 cords each; curry shop 40x20 feet, 3 stories, L 18x40 feet, 3 stories. They employ 100 hands; consume 150,000 bls. gambia per year; 60 cords of hemlock bark, 15 bbls. oil, and 7 bbls. tallow per week, producing 500 hides per week of buff, splits and grain leather. The motive power is furnished from a 40 horse power engine, made by Adams, Hamlin & Co., of Boston; steam from 2 tubular boilers, built by Allen & Endicott. They have sufficient steam to drive the engine, heat the building, &c.

John Maxwell commenced the currying and finishing of upper and harness leather in 1863. He occupies a 3 story building 45x35 for retanning, &c., and finishing shop 1 story 45x20. Works situated in the rear of depot. Em-

ploys 8 hands. For retanning leather he has 6 portable vats with a capacity 30 hides each. His machinery is driven by a 6 horse engine made by Lowell Machine Shop, furnished with steam from a 20 horse power tubular boiler, which also furnishes steam for heating the buildings. Mr. M. consumes 3 tons gambia, 30 barrels tallow and 50 barrels oils per year, and sells about $35,000 worth of goods.

THE WOBURN IRON FOUNDRY, owned and carried on by the American Tool and Machine Company, occupy a building 90x55 feet, with pattern shop, store house, &c. attached, where they employ 25 hands in the manufacture of castings of every description. This firm commenced business in 1862, and melt about 5 tons of iron per week, doing business amounting to $50,000 per annum. Run an engine of 10 horse power, built by C. H. Shute, Esq., of Woburn, with 1 tubular boiler 12 horse power, built by Cunningham of Charlestown, Mass. Office in Boston, No. 45 Kingston street, C. H. Shute, Superintendent.

BLAKE, HIGBY & Co. manufacturers of buff, pebble, grain and split leather, occupy a three story wooden building 150x 30 feet, with a wing 150x50 feet, 1 story, used for tanning purposes, and containing 75 vats. This firm commenced business in 1854, have 40 employees, finish 500 sides of leather per week, doing business of $200,000 per annum. Their machinery is driven by an engine of 15 horse power, with one tubular boiler, 40 horse power, built by Allen & Endicott, of Cambridgeport, Mass., which, in addition to furnishing steam for the engine, heat all the buildings. Office in Boston, No. 94 Pearl street.

HORACE CONN & Co. occupy a 2½ story wooden building, 255x35 feet, with out buildings, store houses, beam houses, &c., covering about an acre of ground, for the manufacture of upper leather of all kinds. Commenced business in May, 1865. Have 110 employees, and finish about 30,000 hides per year, consuming about 3,000 cords of bark. Their machinery is driven by an engine of 40 horse power, built by the Corliss Steam Engine Co., of Providence, R. I., with 2 boilers 80 horse power combined; one built by McKay & Aldus, of East Boston, Mass., and the other by Dobbins & Crawford, of Lowell, Mass.,—which, in addition to furnishing steam for the engine, heat all the buildings. This firm have an office and salesroom located at Nos. 90 and 92 High street, Boston.

KINNEY, GALLAGHER & Co. occupy a 3 story wooden building 55x45 feet, with an ell 40x25 feet, for the currying of leather. Commenced business in 1867, have 20 employees, turn out about 300 sides per week, doing business to the amount of $65,000. Their machinery is driven by an engine of 12 horse power, with one tubular boiler, 20 horse power; the latter built by Allen & Endicott, of Cambridgeport, Mass.

WOLLASTON, 6½ miles from Boston. A small station on the Old Colony and Newport Railroad. For manufactures, see Dorchester and Boston.

WORCESTER, 44 miles from Boston, 44½ from Providence, 157 from Albany, 60 from Norwich and 46 from Nashua, at the terminus of the Norwich & Worcester Railroad, Providence & Worcester Railroad, Worcester & Nashua Railroad and on the direct route from Boston to Albany. Worcester was incorporated as a town in 1684, but on account of the hostilities of the Indians the first town meeting was not held until 1722. This part of the country was called by the Indians, Quinsigamon. The central situation of the town both in regard to the county and state, the fertility of its soil and that of the surrounding country, the salubrity of its climate, the industry, intelligence and wealth of its people, and the fact of its being a great railroad centre justly entitles it to be the chief city in "the heart of the Commonwealth." It is situated in a valley and surrounded by hills of gentle acclivity, on which are the educational institutions, that rank second to none in the country. The city is well built and beautifully shaded.

Among the institutions may be mentioned the American Antiquarian Society, founded in 1812. By the liberality of the late Isaiah Thomas, LL. D., one of its first benefactors, a spacious hall was erected in 1820. Mr. Thomas was the father of New England printers. He published the first newspaper here in 1775; a few years afterwards, the first folio bible in America. The State Lunatic Asylum was established here in 1832. It comprises several beautiful buildings, forming a complete square, enclosed by spacious grounds. They are delightfully located in the eastern part of the city on an elevation, and admirably conducted. The plans and arrangements are so excellent as to render it a model for similar institutions in other States. The inmates number about 350. The Mechanics Association Building; the College of the Holy Cross; the Highland Military Academy; the Oread Institute, and the public schools are all an honor and contribute much to the education, refinement and wealth of the city and to our country. Worcester, ever ready to adopt and carry out practically, new ideas, was among the first to adopt what is known as graded schools, which were introduced into other localities soon after, and now are founded in nearly every city in the Union.

THE HIGHLAND MILITARY ACADEMY, located on the line of the New York and Boston Railroad, was established in 1856, by Mr. C. B. Metcalf, present proprietor and Superintendent, who was previously engaged for twelve years in the public schools of Boston and Worcester, as head master.

The generous patronage extended to it soon rendered the accommodations at the disposal of the Superintendent too limited, and in 1861 a large and commodious edifice was erected, containing general assembly rooms, recitation rooms, library, armory, philosophical and chemical experiment rooms. At the same time a spacious and comfortable hospital was fitted up, and these with other buildings are sufficient for the accommodation of about eighty cadets. All the rooms of the entire establishment are warmed by steam.

In 1867 a riding and drill hall, one hundred feet long by fifty feet wide, was erected on the premises and provided with leaping bars, Saracen's head and post, tournament rings, lances, &c., thus affording full opportunity for horseback exercises and abundant room for military evolutions in inclement weather.

Military drill was introduced as a means of promoting health, improving the figure and personal carriage and making the complete citizen; and when the late war broke out, many of the cadets acted as drill masters in the neighboring towns and states, and others entered as Commissioned Officers into the military service of their country.

The grounds are elevated and extensive, commanding a beautiful view of the surrounding country, and affording opportunity for full and varied exercise, and healthful amusement. They are retired about a mile from the main street, yet easily accessible by a pleasant rural avenue.

The population of Worcester is estimated at from 37,000 to 40,000. Valuation of real estate in 1868, was about $18,-000,000. Personal property, including stocks, about $10,-000,000. Rate of taxation about $12 on each $1,000.

MANUFACTURERS.

A. L. WHITING & Co., occupy a room 40 feet square, located at 34 Beacon street, for the manufacture of hammered plane irons, chisels, shoe knives, &c. Commenced

business in June, 1867. Employ 5 hands; use 2 trip hammers, 3 grindstones, 1 engine lathe and emery wheels, for finishing work.

Sargent Card Clothing Co. Nothing has more greatly distinguished the nineteenth century, than its numerous and valuable mechanical discoveries. The sinews of industry before this era, were as strong and powerful as they are to day; but, they were then guided by mere physicial strength and human courage; they had no developed force in electricity, in steam, in the factory system, in the combination of capital, or in the subdivision of labor. All the forces of industry were isolated and scattered; the axe, the saw, the spindle, and the shuttle worked by themselves, each in the hand of some rude and unskilled artisan. But in the early part of this century, came forth those brilliant and wonderful inventions which have so much accelerated our progress and so wonderfully devoloped our resources of wealth; so largely contributed in making this an age of perfected mechanism and industry.

Beyond the Atlantic in the last part of the eighteenth century, Davy invented the safety lamp, Arkwright the spinning frame and Watt improved the steam engine. At a later period, Stephenson perfected the locomotive, Jacquard his loom for colored fabrics, while Dalton and Liebig discovered many secrets in chemical science. In this country, Franklin taught us the rudiments of electricity, Fulton exhibited to a skeptical world the first steamboat, Whitney perfected the cotton-gin and within the last quarter of a century, Morse astonished us with his magnetic telegraph. These were all great inventions, and they have contributed more or less to the present wealth and prosperity of both continents. About one half a century ago another important invention was first made known to the public. This was a "*Card Clothing Machine*" invented by Eleazer Smith of Walpole, Mass. Contemporary tradition says Mr. Smith was an humble mechanic; that he invented the card clothing machine almost as perfect as it is now—but failed to reap any material reward for his wonderfully intelligent invention. He died poor like James Hargraves, who invented the carding machine, and like Samuel Crompton, who invented the mule, at about the same period in England. It is the old story of the pioneer subduing the wilderness without gain or profit, while others who come after him reap the golden harvest.

Prior to the invention of "Smith's card clothing machine," all cotton and wool were prepared for manufacture in a slow and imperfect manner. We read in ancient history that the Hindoos and Chinese made cotton goods, long before the Christian era, but the process was slow, tedious and imperfect. The Egyptians, the Italians, the Moors of Spain, and the people of the Netherlands next began the manufacture of cotton goods; but for six centuries they made few, if any, improvements in labor-saving machinery. There were no mills then, no combined system of machinery, but all was done by hand in the rudest way, in the humblest huts of the poorest laborers. To England are we indebted for all the earlier inventions in cotton and woolen machinery; and Arkwright, Crompton and Hargraves must be considered the fathers of the present factory system in England; while to Samuel Slater, Eleazer Smith and others, belongs the credit of the invention, application and perfection of American cotton and woolen machinery.

The card clothing business in the United States, has now arrived at what we may call "perfection," and the largest, most perfect, best managed establishment of the kind in this country, (perhaps in the world,) is The Sargent Card Clothing Company, of Worcester, Mass. The engraving at the head of this article gives a perfect daguerrotype of their factory, located near the Junction depot. It is a new establishment, having being in operation but two years; but it is now doing a business equal, if not larger, than any other similar manufactory in this country—the daily production being from 600 to 800 square feet card clothing. The mill, as the engraving represents, is a structure of great architectural beauty and is also of liberal size. And the exterior is but a type of the large business which is carried on within its walls. We have visited many model factories in New England, but none of them surpass this establishment in its adaptability, its great neatness, its systematic regulations and the *superior character of its productions*. A determination to make *the best* and *most perfect card clothing* that adequate capital, *improved machinery and first class mechanical skill* could produce, has not only established its reputation, but has given its productions the preference among the leading cotton and woolen manufacturers in the country.

There are now in operation in this mill 140 machines. *These were all built by the company* in the most thorough manner, and possessing some very valuable improvements are able to do nearly *one third more work, and much more uniform and perfect*, than the machines in general use. Further additions will be made to the power of the mill, (which has a capacity for 280 machines as the great manufacturing interest revives to active life and the demand for card clothing increases.

In every department of the mill, there is convincing evidence of a *thorough system*, fully exhibiting the policy of well organized labor under judicious management. With an experience of twenty-five years in the most celebrated card clothing factories in this country, the superintendent, Mr. Edwin S. Lawrence, is practically fitted for his important position. The complete working of the manufactory is constantly under his personal supervision and care, and every foot of the card clothing is subjected to a thorough examination before shipping, so that *no defective work is permitted to leave the premises*. As a further security to purchasers, the company *guarantee every square foot of their goods* to *prove by actual work the best, or be replaced without cost.* There could be no stronger evidence than this of the determination of the company to supply the very best quality of goods, *while regulating their prices according to the strictness equity.*

The Sargent C. C. Co. besides making every variety of cards set in leather and cloth, adapted to the working of cotton, wool and flax fibre, have recently substituted paper backs for cards, which can be used in many cases where leather will not stand. This style is peculiarly adapted for drying machines, as the heat necessary for drying the cloth has no effect on the paper backs. A patent was granted this company Oct. 20th, 1868, for this style card.

Another description of card of which this company make a "specialty," is the felt-face or self-flocked card, obviating all necessity of flocking, forming a cushion for the teeth, re-

SARGENT CARD CLOTHING CO.,

Worcester, Massachusetts.

Manufacturers of every variety of

MACHINE CARDS

FOR

COTTON, WOOL AND FLAX,

SET IN LEATHER AND CLOTH.

SPECIALTIES.

Our Patent Paper Back Cards. Diamond Point, for Drying Machines and Heavy Work.

—ALSO—

FELT FACE, OR SELF FLOCKED CARDS.

All descriptions of

HAND & STRIPPING CARDS, MANUFACTURERS' SUPPLIES, &C., &C.,

TO ORDER, AT LOWEST MARKET RATES.

ED. S. LAWRENCE, Superintendent.

SARGENT & CO., New York, Agents.

M. A. WORCESTER,
Proprietor and Manufacturer of Worcester's World-Renowned

DRY HOP YEAST,

Liquid Blue, Dr. Greeley's Bourbon Bitters,

And dealer in

HOPS.

Constantly on hand Hops in Bales and parts of Bales, suitable for Brewers, Bakers and Retailers, also in pound and half pound packages, and in cases of Fifty pounds and upwards.

No. 6 BRIDGE STREET, near FRONT, - WORCESTER, MASS.

moving all liability of teeth breaking out—will grind quicker and hold the point longer. Both of above described cards are giving perfect satisfaction, wherever used.

Manufacturers supplies of every variety, hand and stripping cards of all descriptions are furnished to order at lowest market prices.

We cordially say to all our cotton, woolen and flax manufacturing friends go to "The Sargent Card Clothing Co.," and examine for yourselves. You will receive a courteous and gentlemanly welcome and should you patronize the establishment you will find it honorable in all its transactions.

M. A. Worcester occupies a 3 story wooden building, with basement, 40 x 100 feet, located at No. 6 Bridge street, for the manufacture of dry hop yeast. Commenced business 1864; employs 10 hands and turns out 3,000 gross per month. Does a business of $100,000 per year.

Warren Thread Co. occupy a 4 story brick building 46x90 feet, located on Grove street, for the manufacture of white and colored thread. The business was established in 1847. Make 8,000 dozen spools of thread per week. Their machinery is run by a 60 horse power engine, built by the Corliss Steam Engine Company, of Providence, R. I.

Clark & Pero occupy a wooden building 40x90 feet, located at the Junction, for the manufacture of all kinds of machinery and castings. Commenced business in January, 1868. Employ 20 hands. Melt about 3500 pounds of iron, per day.

A. Tolman & Co. occupy 18000 square feet of floor room in 4 wooden buildings attached, located at No. 10 Exchange street, for the manufacture of light carriages and hearses and general jobbing. Commenced business in 1833. Number of employees 25, and turn out 50 carriages per annum.

William F. Wheeler's iron and brass foundry, is situated on a line of the Worcester & Nashua Railroad, on Thomas, Union and Central streets, and contains about 100 square feet of land with a branch track connecting the premises with the Worcester & Nashua and all the other railroads in the city, and with platform track scales for weighing loaded cars and wagons. The buildings comprise a large brick foundry 190x75 feet, with an L 75x50 feet, used as a wareroom, engine and coal room; also, a side wing 84x20 feet. There are in the foudry 4 cupola furnaces, 4 large cranes, 4 large drying ovens; also, 3 pits for casting dry sand work; also, a bras foundry 40x25 feet, with 3 crucible furnaces and 1 reverbatory furnace, for making calleneder rolls and other large composition castings; also, 1 brick building 25x75 feet, 2 stories high; the first story being used for counting room and receiving room for patterns, and the second story and attic for storing patterns. Connected with this is a brick machine shop 70x70 feet, 2 stories high, containing a variety of large and small tools and machinery, necessary for the business. The blowing apparatus consists of 2 cylinders 34x48 inches, the power of which is not excelled by any improvement now in use. On the south side of Thomas street is a forging shop 65x31 feet, containing 1 large trip hammer and 5 fires, blown by a fan of sufficient capacity; also, have a stove and furnace shop, 1½ stories high 40x40 feet with an L 40x20 feet; a charcoal house 54x25 feet; an anthracite coal and lumber house 65x30 feet and one 40x24 feet; a flask house 80x20 feet; a store house 60x20 feet; also, a wood house 70x24 feet.

This is one of the oldest establishments of the kind in the State, having been commenced by Mr. Wheeler's father in 1825, and carried on by him for 43 years. The first steam engine employed in the State west of Boston, was put up in these works. Mr. Wheeler's father was the first to manufacture hot-air furnaces in Massachusetts, and notwithstanding the number of new articles of this class with which the markets have been supplied, his furnace maintains an undiminished popularity though but few changes have been made in it to provide an increase of radiating surface since its introduction in 1835. In these works are manufactured machine, railroad iron, and composition castings, stoves and hot air furnaces, for wood or coal. Trip and drop hammers, water, gas, and steam pipe, hydrants retorts, boring machines and punching presses, &c. &c. Mr. Wheeler was one of the most respected and ingenious, as well as one of the oldest of the American iron founders, and among the latest of his inventions are improved drop and trip hammers which are extensively used in the manufacture of fire arms and jobbing, and a number of them are now in use in the goverament armories. The power for operating the whole machinery is obtained from an upright engine of 30 horse power.

Plummer Granite Co., occupy ground 50x100 feet, for the manufacture of rough and hammered stone of all kinds, located at Southbridge street, Junction. Commenced business in March, 1866. Employ 15 hands, and do a business of $60.000 per annum. This company have a quarry which covers between 18 and 20 acres of ground, located at Northbridge, Mass., where they employ 150 men in getting out stone.

S. C. & S. Winslow occupy 2 floors of a brick building 40x100 feet; also, 1 three story building 30x30 feet, and 1 grinding shop 20x24 feet; commenced business in 1856; employ 25 hands for the manufacture of skates and gearing; turn out 25,000 pairs of skates per year; do a business of $50,000 per annum.

W. A. WHEELER'S

NEW AND IMPROVED

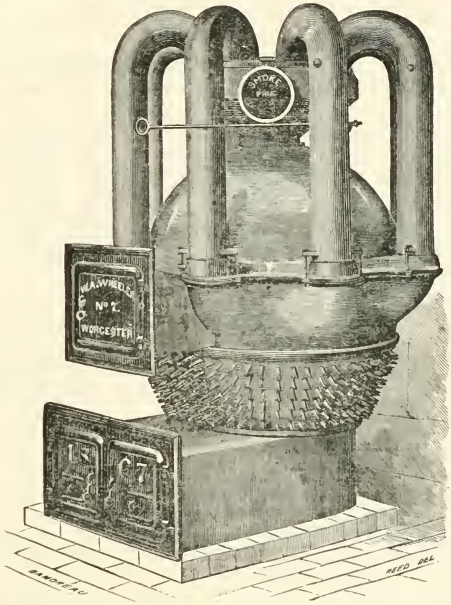
SELF-CLEARING, RADIATING, HOT AIR FURNACE,

Seven Different Sizes.

FOR HEATING

Churches, School Houses,

AND ALL KINDS OF



Public Buildings,

AND

Private Residences.

This Furnace is confidently recommended for its large amount of

Radiating Surface, Simplicity of Construction, Economy and Durability, it being

MADE ENTIRELY OF CAST IRON.

Unlike any other in the market it is self-clearing, special attention having been given in the construction and arrangement of the drum and radiating pipes to avoid the possibility of filling up with soot or ashes.

No better recommendation is needed of this Furnace than the fact that of the many sold since its introduction, not one has failed to give satisfaction. Architects, Builders, Committees, and others in want of a reliable and serviceable Furnace, are invited to call and examine.

FOR SALE WHOLESALE AND RETAIL BY

LEVI CHUBBUCK.

Successor to Leopold Herman. **No. 10 BEDFORD STREET, BOSTON, MASS.**

AND BY THE MANUFACTURER,

W. F. Wheeler, Worcester, Mass.

E. & C. NEWTON,

MANUFACTURERS OF PATENT

WOODEN EAVE TROUGHS,

CUTTERS AND CONDUCTORS,

Constantly on hand all sizes necessary for Buildings of every description. This article is sawed from the Best Pine Stock. It makes a neat finish, and is more durable and less expensive than any other used for the purpose, and can be applied with equal facility to new or old buildings.

ALSO, PIPE FOR DRAINS.

EZEKIEL NEWTON. }
CHARLES NEWTON. }

Corner Union and Exchange Sts., Worcester, Mass.

New York Steam Engine Co. occupy 1 brick machine shop 125x40 feet, 3 stories; 1 wooden building 75x80 feet, 1 story; brick blacksmith shop 40x75 feet; a brick foundry 52x96 feet; a brick pattern and store house 25x90, 3 stories, wood, and several other smaller buildings, located on Washington street, on a line with the Providence & Worcester and Boston & Albany Railroads.

They employ 160 hands, turn out 1,000 tons of castings per year, use about 100 machines and manufacture machinists' tools of every description; patent car wheels, steam stamps, &c. These works are run by 2 horizontal steam engines, with Brown's patent cut off,—one 30 horse power, and the other 10 horse power, built by Wood & Mann Steam Engine Co., of Utica, New York; 2 tubular boilers—one 40 horse power and one 15 horse power; one built by Wood & Mann Steam Engine Co., of Utica, and one by Rice, Barton & Fales, of Worcester. This company have an office and salesroom at 126 and 128 Chambers street, New York, and they are well known and long established.

N. A. Lombard & Co. occupy a three story brick building, 130x40, located on School street, for the manufacture of woolen machinery. Commenced business in 1866; employ 75 hands, run a 75 horse power steam engine, built by the Corliss Steam Engine Co., of Providence, R. I.

Cleveland & Bassett, occupy 50,000 square feet of room in the Junction Machine Shop, for the exclusive manufacture of woolen machinery. They commenced business in 1862. Employ 200 hands; run 1 of Corliss' steam engines, 150 horse power, 2 cylinder boilers; using at present 50 tons of casting per month; doing a business of $300,000 per annum.

Smyth Bros. & Co. occupy four floors containing 6,300 square feet, in a three story brick building, located at No. 6 Bangs Block, Main street, for the manufacture of shoes. Commenced business in 1850; have 45 employees, and turn out 900 cases per annum. Power furnished by a three horse power calcric engine, Roper's patent. Jobbing house, No. 1 Mechanics Hall building.

Lathe & Morse occupy 150x50 feet in lower floor of stone building, located at Worcester Junction, for the manufacture of machinists' tools, such as engine lathes, planing machines, milling machines, crank planers, &c. Commenced business in 1845. Employ fifty hands; use 30 lathes, 8 planers and the usual amount of tools used in the business; use about a ton of castings per day.

Taylor & Farley occupy a 5 story wooden building 36x100 feet, located at No. 3 Hermon street, for the manufacture of organs and melodeons. Commenced business in 1855. Employ 75 hands; turn out 36 instruments per week and do a business of $175,000 per annum.

Peter Goulding occupies 2 rooms in a brick building each 20x60 feet, located at 45 Front street, for the manufacture of leather belting. Commenced business 1850. Cuts up 100 sides of leather per month, and does a business of $12,000 per annum.

H. Baker occupies a room 25x70 feet in 2d story of brick building, located at No. 313 Main street, for the manufacture of women's, misses' and children's lace boots. Commenced business in 1852. Employs 20 hands, makes 100 pair of boots per day and does a business of $30,000 per annum.

Wood, Light, & Co. occupy one floor 50x400 feet, located at the Junction; commenced business in 1846; employ 60 hands, for the manufacture of all kinds of machinists' and gunmakers' tools, and trip hammers. Use 500 tons of iron, steel, &c., per year. Do a business of $100,000 per year.

C. J. Richards occupies 1 room 24x30 on third floor, in 3 story brick building, located at No. 1 Pleasant street for the manufacture of boot and shoe patterns, of wood and pasteboard, with brass edges, of sheet iron, tin, zinc, or paper. Commenced business in 1860. Has 3 employees.

William H. Brown occupies a room 30x40 feet, in a brick building, located at No. 46 Mechanic street, for the manufacture of knives for moulding machines. Commenced business in 1856, and employs 4 hands.

A. B. Lovell occupies an acre of land on May street, for the manufacture of cement drain pipe. Commenced business in 1865. Employs 10 hands, using about a hundred barrels of cement per week.

H. B. Adams occupies a 2 story wooden building 20x40 feet, located on Grove street, for dying garments of every kind; also, threads, yarns, &c. Commenced business in 1828, and employ 5 hands. This is the oldest establishment of the kind in the city.

Hill, Devoe & Co., successors to Trumbull & Hartshorn, are located at the junction of Providence, Grafton and Water streets, for the manufacture of envelopes.

Washburn Iron Co. occupy 4 acres of ground for the manufacture of railway iron and car wheels, located on the Bloomingdale road, on a line with the Boston & Albany Railroad.

Lawler & McGrath occupy a 3 story wooden building 25x40 feet, located on Grafton street, for currying leather. The business was commenced by Mr. Thomas Lawler, about 1853. In April, 1868, took McGrath as partner in the business. Curry 150 sides per week.

Prov. Machinist Tool Co. Works removed from Grafton street, Worcester, to Eddy street, Providence, R. I.

NEW YORK

Steam Engine Company,

—MANUFACTURERS OF—

MACHINISTS'

TOOLS!

Of Every Description,

WORCESTER, MASS.

GEORGE PLACE, Pres. - - - JOHN H. CHEEVER, Treas. - - - CHAS. F. HARDWICK, Sec.

ENGINE LATHES,
LOCOMOTIVE DRIVING WHEEL LATHES,
AXLE LATHES,
CHUCKING LATHES,
HAND AND DRILLING LATHES,
LATHE CHUCKS,
PATENT COUNTER SHAFTS,
WOOD TURNING LATHES,
PLANING MACHINES,
CRANK PLANERS,
PLANER CENTERS AND CHUCKS,
SHAPING MACHINES,
SLOTTING AND PARING MACHINES,
UPRIGHT DRILLS,
SUSPENSION DRILLS,
RADIAL DRILLS,
TRAVERSE DRILLS,
HORIZONTAL BORING & DRILLING MACHINES,
COTTER AND KEY SEAT DRILLERS,
CAR WHEEL BORER,
MILLING AND SLABBING MACHINES,
TAPS AND DIES,
RACK CUTTING MACHINES,
PUNCHING AND SHEARING MACHINES,
HYDRAULIC WHEEL PRESSES,
NUT AND BOLT HEAD SLABBER,
SHAFTING, PULLEYS, HANGERS, GEARING, CASTINGS, IRON AND BRASS, &c.,
FAN BLOWERS AND CRANES,
HOISTING MACHINES,
STEAM HAMMERS.

OFFICE AND SALESROOM,

126 and 128 Chambers Street,

NEW YORK.

THOMAS SMITH & CO.,

MANUFACTURERS OF

BOLTS, NUTS, WASHERS, CHAIN LINKS,

AND FIVE SIZES OF POWER PUNCHING PRESSES.

Also, Makers of Sections and Scythe Bars for Mowing Machines; Heel and Toe Plates for Boots.

Merrifield's Building, Nos. 3 and 5 Cypress Street,

WORCESTER, MASS.

Thomas Smith, William Conkey, E. W. Nichols.

RICHARDSON, MERIAM & Co. occupy 2 rooms 50x100 feet each, including a forge shop 20x30 feet, a pattern shop and store room, 2 stories high 25x40 feet, and dry house 20 x50 feet, located in Junction shop, Worcester Junction, for the manufacture of Daniels', Woodworth's and dimension planers; boring, matching, moulding, mortising and tenoning machines, scroll, cut-off and slitting saws; saw mills, saw arbors, spoke and wood turning lathes and wood working machinery. Commenced business in 1862, and employ 90 hands. Use about 35 tons of castings per month and a proportionate amount of iron and steel and do business to the amount of $200,000 per annum. Warehouse 107 Liberty street, New York city, one of the largest manufacturers of machinery in the country, and their productions are extensively distributed throughout the country.

THOMAS SMITH & Co. occupy two rooms, one 40x90 feet, and the other 50 feet square, located at Nos. 3 and 5 Cypress street, Merrifield Building, for the manufacture of bolts, nuts, washers, chain links, &c. Also, section and scythe bars for mowing machines. Commenced business in 1855; employ 20 hands, use 12 presses, 4 engine lathes and 1 planer. Use about 200 tons of iron and steel per annum, and manufacture 5 sizes of power punching presses, weighing from one to 16,000 pounds; do business amounting to $45,000 per annum.

J. F. REED occupies a store 25x60, and two rooms 40 feet square, in two story wooden building, located at 231 Main street, for the manufacture of sheet iron stoves and tin ware of all descriptions. Number of hands employed, 10.

RICE, BARTON & FALES, Machine Iron Co., occupy a 4 story brick building, with a foundry attached, which covers 35,000 feet of land, located on Union street, near the Boston & Worcester Railroad station, for the manufacture of machinery for printing calicoes and delaines, and for the manufacture of paper. Commenced business in 1845, and was incorporated in 1867. Employ from 100 to 150 hands, use 1,200 tons of iron per annum. Their machinery is run by a 50 horse power engine of their own manufacture. They also use a 15 horse power engine of their own make, to run the machinery of their foundry. George M. Rice, George S. Barton and Joseph E. Fales form the company.

THE THOMAS IRON WORKS, situated in Merrifield's Building, Nos. 5 and 7 Cypress street, occupy one room, 100x40 feet, for the manufacture of their justly celebrated engine lathes, for which letters patent have been granted and which are rapidly growing into favor with all good machinists. They also make a superior kind of upright drills, and various other kinds of machinists tools; also, do all kinds of jobbing on iron work. They also occupy a pattern room 100x 20 feet, in which they design and manufacture patterns for every description of machinery, both light and heavy. This establishment went into operation in 1863, and is well worth a visit to all who appreciate good workmanship.

J. W. HOWE & Co. occupy 8,000 square feet of room in a three story wooden building, located at No. 99 Main street, for the manufacture of wire goods and wire cloths, of all descriptions. Commenced business in 1856, and have 45 employees.

J. M. GOODELL occupies 1 room 40x90, on third floor in brick building located at No. 11 Cypress street, for the manufacture of desks, ivory tables, and furniture of all descriptions. Commenced business in 1852; has 12 employees and machinery adapted to business.

PHELPS & FOSKIT occupy a wooden building 40x60 feet with a wing 35x50 feet, also a two story wooden building attached, 28 feet square, for the manufacture of stoves and machinery of every description. Commenced business in June, 1868. Employ 23 hands and turn out 37 tons of castings per month. One of Munroe's patent turbine water wheels 7 horse power supplies the power. This company are sole manufacturers of the Worcester Clipper.

J. WALKER & Co., occupy 2½ stories of a brick building, 60x90 feet, located on Lincoln square, for the manufacturing of men's boots. Commenced business in 1843, employ 150 hands, and run a 6 horse power steam engine, built by Rice, Barton & Fales, Worcester, Mass., and turn out 6000 cases per annum.

SMITH & TYREL occupy a 3½ story brick building, 30x40 situated on Cypress street, opposite Boston and Worcester Railroad depot, for the manufacture of American Kip and Stoga Kip Boots. Commenced business March, 1868, employs 45 hands, and turn out 50 cases per week.

H. B. JENCKS & Co, occupy 2 floors 100x50 feet, and a basement 35x50 feet, in 2½ story wooden building, located at No. 1 Park street, for the manufacture of boots and shoes. Business was first commenced by Mr. Jencks, in 1860. Employ 60 hands, and turn out 2,940 cases of boots, 643 cases of shoes per annum. Power furnished by a Caloric, 4 horse power engine, Ropers patent, and turn out $109,000 worth of goods per annum.

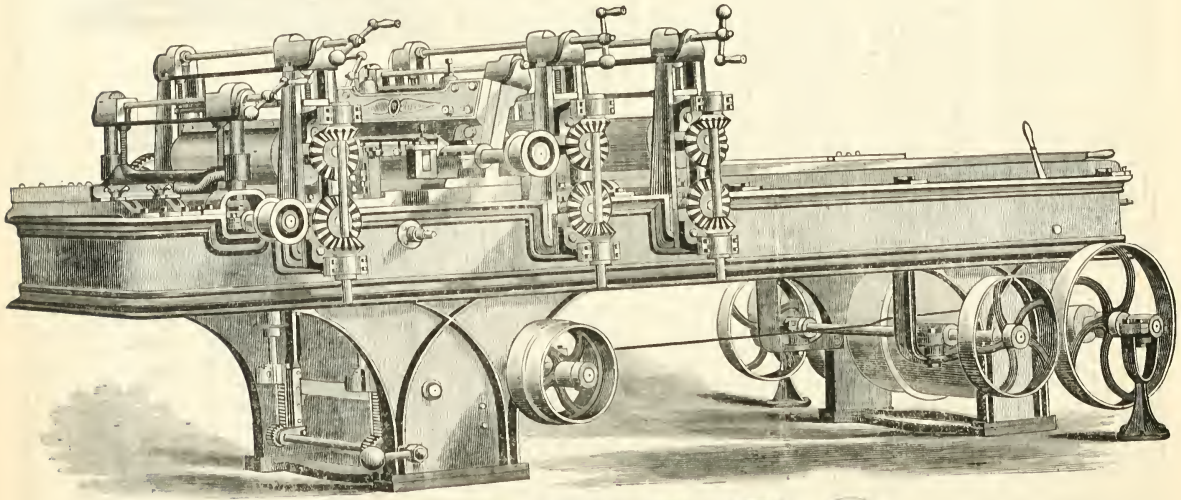
OSCAR F. RAWSON occupies 1 store on first floor, in a 4 story brick building, located at No. 243 Main street, for the manufacture of cigars. Commenced business in 1868, and has 4 employees, and turns out 200,000 cigars per annum.

M. E. SHATTUCK & Co., occupy first floor with basement 22x80 feet, in 4 story iron front building, located at No. 261 Main street, for the manufacture of cigars. Commenced business in 1858, and turn out 300,000 cigars per annum; employ 10 hands.

RICHARDSON, MERIAM & CO.,

Manufacturers and dealers in

Daniels', Woodworth and Dimension



PLANERS,

Boring, Matching, Moulding and Tenoning Machines, Scroll, Cut-Off & Slitting Saws, Saw Mills, Saw Arbors, Spoke and Wood-Turning Lathes, and all kinds of Wood-Working Machinery.

WAREHOUSE, 107 LIBERTY STREET, NEW YORK.

H. A. RICHARDSON, R. N. MERIAM,

MANUFACTORY, WORCESTER, MASS.

W. B. McIVER, S. F. BOND.

A. G. MANN,

Granite Dealer

And Manufacturer of

GRANITE MONUMENTS

And Head Stones,

From the best New Hampshire Granite.

59 & 61 SOUTHBRIDGE STREET,

WORCESTER, MASSACHUSETTS.

Plain and Ornamental Building Fronts and Cemetery Curbing furnished and set up in the best manner. Heavy Engine Stone furnished at short notice. Derricks to sell or rent.
N. B.—Designs furnished at short notice.

E. & C. Newton now occupy second floor of wooden building 40x85 feet, located on Union street, for fitting and putting up patent eave troughs and conductors. Commenced business in 1860; employ 2 hands; do a business of $12,000 per year. (See advertisement, page 400.)

A. G. Mann occupies 10,000 feet of ground, located at 59 and 61 Southbridge street, for the manufacture of granite monuments and head stones, cemetery, curbing, and building stone. Commenced business in 1857; employs 30 hands. He also has a quarry at Marlboro', New Hampshire, where he employs 10 hands in getting out stone. Does a business of upwards of $50,000 per annum.

L. J. Knowles & Bro. occupy a five-story brick building, 45x107 feet, located at the corner of Southbridge and Main streets, in Allen's court, for the manufacture of Knowles' patent looms, cloth presses and jack screws. Commenced business in 1862. Employ between 50 and 60 hands, and have capacity for turning out five looms per day. Use a steam engine of 30 horse power, built by the Putnam Machine Co., of Fitchburg, Mass.; a boiler of 60 horse power, built by Campbell & Whittier, of Boston, Mass.; use one of L. J. Knowles' patent pump and boiler feeders. This company have taken the highest premium at many fairs in the United States for patents on different parts of their machinery; gold and silver medals, etc., on boilers, feeders, looms and pumps.

The Gilbert Loom Co., successors to Charles W. Gilbert, occupy the lower floor of a 2 story brick building 50x150 feet, known as Merrifield's buildings, and located at the corner of Union and Exchange street, for the manufacture of plain and fancy looms, yarn dressing machinery, mill shafting, &c. Chas. W. Gilbert commenced business in 1866, the present company succeeding in 1869, and employ 20 hands.

Stone, Walker, & Brown occupy 4 floors 60x70 feet, with a basement, in brick building located at Nos. 303 and 305 Main street, for the manufacture of boots and shoes. Commenced business in 1835; employ 150 hands, and turn out 5,200 cases per annum.

H. B. Fay & Co., occupy four floors 50x90 feet, in brick building, situated at No. 9 Southbridge street, for the manufacture of men's, boys' and youths' calf, kip, thick, split, buff, and grain boots. Commenced business in 1848. Employ 100 hands. Run a 3 horse power steam engine, manufactured in Fitchburg, Mass. Turn out 5000 cases per annum.

Bigelow & Barber occupy a $2\frac{1}{2}$ story wooden building 38x73 feet, for a woolen mill, with a dye house 20 feet square, located at Hopeville, near the city of Worcester, for the manufacture of satinets. Commenced business in 1852. Employ 30 hands. Run 16 looms, 1 picker, 2 sets of cards, 3 jacks, 1 duster, and finishing machinery. Power furnished by a United States water wheel, 35 horse power, built by J. W. Upham, of Worcester, Mass. Turn out 156,000 yards of cloth per annum.

Messinger & Wright's Woolen Mills occupy one 4 story brick building 123x48 feet, and 1 wooden building 143x35 feet and 3 stories high, with wool shop, dry room and dye house adjoining, for the manufacture of fancy cassimeres. Commenced business in 1862; employ 300 hands. Use 16 sets of woolen machinery, run by a 150 horse power engine, Noble T. Greene's patent, built by the Providence Steam Engine Co., (formerly Thurston, Gardiner & Co.) of Providence, R. I., with 5 cylinder boilers.— 3 built by Rice, Barton & Fales, of this city. The other 2 by Providence Steam Engine Co., Providence, R. I. Turn out 2,200 yards of cloth per day, and do a business of upwards of $500,000 per annum.

A. M. Howe occupies the lower floor of brick building 30x100 feet, located at No. 46 Mechanic street, for the manufacture of leather, cloth and paper cutting dies of every description. Commenced business in 1858 at Westboro'; commenced business here in 1860. Employs 14 hands, runs an upright engine, 15 horse power, built by Putman & Whittemore, of South Boston; 1 tubular boiler, 25 horse power, built by Stewart & Dillon, Worcester, Mass.

J. A. Hunt occupies a 3 story brick building 25x60 ft., L attached 25x60 feet, 1 story; stone building for dye and wheel house 30x40 feet, 1 story; brick building 22 x 20, for picker; 1 story building 15 x 20, for dye house; a 1 story wooden building 20 x 20 feet, for office, located at Valley Falls, near Worcester, for the manufacture of woolen satinets. Commenced business in 1843. Number of employees 17; machinery consists of 2 sets of satinet machinery, turns out 3,000 yards and uses stock to the amount of 2,400 pounds per week. Power furnished from a 35 horse breast wheel.

GEORGE HOLT,

(LATE H.IMPSON & HOLT)

Manufacturer of

ENAMELED CAR-HEAD LININGS,

Of all kinds,

FRESCOED AND ORNAMENTED IN THE MOST IMPROVED STYLE

For Sleeping Cars, Etc.

96 SOUTHBRIDGE STREET, WORCESTER, MASS.

CROMPTON LOOM WORKS. George Crompton, Proprietor, occupy a 3½ story brick building 50x110 feet as a machine shop with a wing 40x50 feet as a blacksmith shop and engine room, also a 2½ story wooden building 45x185 feet for the erection of machinery, a foundry 50x120 feet and other outbuildings, storehouses, &c. Commenced business in 1851. Employ upwards of 200 hands, and when in full operation about 300. Power furnished from two steam engines—one 40 horse power and the other 20 horse power, built by Corliss Steam Engine Co. of Providence, R. I. Three boilers, 1 made in Worcester, and 2 by Corliss Steam Engine Co. of Providence. Turn out from 3 to 6 looms per day.

WORCESTER STEAM BOILER WORKS occupy a wooden building 50x80 feet, and sheds covering about 8,000 square feet of land, located on Cypress street, between Foster and Exchange streets, for the manufacture of locomotive, flue and tubular boilers, oil and water tanks, gasometers, etc. Commenced business in 1865, and have 20 employees. The machinery consists of 2 punches, 1 of Taft's patent power shears, 1 drilling machine. Power furnished by a 5 horse power steam engine, Geo. Washburn's patent, and use about 60 tons of iron per annum, and do a business amounting to $20,000 per annum.

WITHERBY, RUGG, & RICHARDSON occupy one floor of three story brick building 50x125 feet, with a wing attached 40x100, also, a forge shop, 20x36 feet, located at 24 and 26 Central street, corner Union, for the manufacture of wood working machinery, such as Woodworth's planers, and tonguing and grooving machines and power mortising machines, &c. Commenced business in April, 1864. Employ 26 hands, use about 45,000 pounds of cast, and 8,000 lbs. of wrought iron per month, besides a large quantity of cast steel. Run 5 planers, 18 engine lathers, 3 upright drills, 1 screw machine, and a variety of other machines necessary for the business.

A. H. HAMMOND occupies 2 floors 30x90, in a four story building, located at No. 2 May street, for the manufacture of organ reeds; employs 15 hands, and turns out 350 sets of reeds and boards per week. Uses one-half the power of a 25 horse power engine, built by Brown, of Fitchburg, Mass.

E. N. CHILDS occupies four floors, 68x24, in three story brick building, located at No. 1 Bangs Block, Main st., for the manufacture of men's, boys' and youths' boots. Commenced business in 1852; employs 60 hands, and turns out 2,000 per annum. Amount of business per annum, $75,000.

L. STONE & Co. occupy three floors 30x80 feet, in brick building, situated at No. 5 Washington square, near the Western depot, for the manufacture of ladies', misses', children's, men's, boys' and youths' shoes. Commenced business 1858; employ 100 hands. Run a 12 horse power steam engine, manufactured by Hobbs & Son, West Cambridge, Mass., and turn out 14,000 cases per annum.

UNION PAPER BOX CO. occupies 1 room 20x80 ft, on third floor in 4 story iron-front building, located at No. 257 Main street, for the manufacture of plain and fancy boxes of all descriptions. Commenced business June, 1868; employs 15 hands, cuts up 50 tons straw board per annum, and turns out 1,500 boxes per day.

GEORGE HOLT occupies a 2½ story wooden building 38x110 feet, located at 98 Southbridge street for the manufacture of enameled car head linings of all kinds. Commenced business 1851, has 12 employees, and turns out 500 linings per annum.

T. BLAISDELL occupies a 2 story wooden building 36x100 feet, located at Worcester Junction, for the manufacture of machinists' tools, such as lathes, planers, drills, gear cutters, &c. Commenced business in April, 1865. Employ 40 hands. The machinery used consists of 18 lathes, 4 planers, 3 upright drills, 1 gear cutter, 1 circular saw and pattern lathe, run by a 12 horse power engine, built by the Corliss Steam Engine Co., of Providence, R. I. Use one of Gould & Pearce's boilers, 12 horse power, built at Cincinnati, Ohio. Consume about $1,500 worth of steel, &c., per month, and do a business of $60,000 per annum.

JUNCTION FOUNDRY occupies 35,000 feet of ground, located at Worcester Junction, for the manufacture of machinery and tool castings, such as blacksmiths' forges, trip hammers and stoves; also, Rose's water wheels and other mill castings. This institution has been in operation for over 20 years. At present it employs 47 hands, and are making 85 tons of castings per month. Power furnished by a 15 horse power engine, built by Bellows & Whitcomb, of Worcester, Mass. They have a capacity for making 150 tons castings per month. The business is conducted by Mr. E. A. Muzzey.

N. WASHBURN occupies a brick building 60x208 feet, located on Grafton street, for the manufacture of cast steel locomotive tires. Commenced business in 1866; employs 20 hands. These cast steel locomotive tires are the first made in the United States. Uses 30 tons of coal per month; runs a steam engine 250 horse power, built at the Globe Works of South Boston, Mass., 2 tubular boilers made by the Hinckley & Williams Works, of Boston. Has a capacity for melting six tons per day. Uses for melting purposes, a gas melting furnace, Mr. Leamans' patent, of Birmingham. Uses 3½ to 4 tons of coal per day.

J. H. & G. M. WALKER occupy 2 buildings 40x75 feet each, 4 stories, built of brick, located at 53 Front street, for

I. N. KEYES'

Planing, Moulding and Box Mill,

24 AND 26 CENTRAL STREET,

Worcester, Mass.

Having one of the largest Mills of the kind in the country, New Machinery of the most improved kinds made, gives me unrivalled, facilities for working lumber into any form desired.

MOULDINGS,

Of an endless variety of styles and sizes, worked in a superior manner.

PACKING BOXES,

Of almost all kinds, made of a good quality of lumber, and at low rates; and forwarded promptly, on application, either nailed in the stock or by the car load, to any desired locality.

the manufacture of boots, also manufacturers of leather in Chicago, in buildings on North Branch, on a lot of 350 feet river front, have a capacity for tanning 30,000 hides per annum. Commenced business in 1862. Employ 450 hands; run a steam engine 8 horse power, built by Campbell & Whittier, Boston, Mass., 1 tubular boiler; turn out 425 cases per week, and do a business of $100,000 per annum.

LUCIUS W. POND occupies a three story brick building 40 x196 feet, located at the corner of Union and Exchange streets, for the manufacture of every description of machinists' tools, such as engine lathes from 5 to 35 feet long and 15 inches to 10 feet swing; planers from 4 to 36 feet long and from 20 inches to 6 feet wide, upright and suspension drills, gear and bolt cutters, index machines, boring mills, &c. Established in 1847. Average number of hands employed is 100. Motive power from a steam engine built by himself, 60 horse power.

A. W. JOHNSON occupies three floors 40x80 in wooden building, for the manufacture of shoddy. Commenced business in 1866. Employs 6 hands. Turns out from 3,500 to 4,000 lbs. per week; does a business of about $35,000 per annum.

L. & A. G. COES occupy two 2 story wooden buildings 35x75 feet each, with a blacksmiths' shop attached 45x75 feet located at Webster Square, for the manufacture of screw wrenches. Commenced business in 1838. This firm have 40 employees; use 150 tons of iron and turn out 20,000 wrenches per annum. The blacksmiths' shop consumes 150 tons of coal annually. Run a three feet turbine water wheel built by A. M. Swain of North Chelmsford, Mass.

CURTIS & MARBLE occupy a three story brick building 40 x80 feet, also the lower floor brick building attached 45x60 feet, also a blacksmiths' shop 25x30 feet, located at Webster Square, for the manufacture of cloth finishing machinery. Commenced business in 1832. Employ 30 hands. Power furnished from 2 water wheels, 1 breast and the other turbine, built by Joel Upham of Worcester. This company make a specialty of the manufacture of shearing machines for both cotton and woolen goods.

E. H. STARK & Co. occupy 10 rooms, each 25 feet square in brick building, located at No. 3 Southbridge street, for the manufacture of kip, thick and gents' boots. Commenced business in 1864. Employ 90 hands. Consume 400 sides of upper and sole leather, and turn out 100 cases of boots per week.

D. MANNING occupies two floors 40x50 feet, in two story wooden building, located at No. 3 Pleasant street, for the manufacture of boots and shoes. Has 50 employees, and turns out 50 cases per week.

I. N. KEYES occupies 2 floors,—one 50x125 ft., the other 40x100 feet, in 3 story brick building, located at Nos. 24 and 26 Central street, for the manufacture of packing boxes and as a planing and moulding mill. Commenced business in 1856; employs 25 hands, runs three planing machines, 2 moulding machines, 1 clapboard machine, 1 circular and 1 scroll saw. An average amount of boxes turned out each day is 350. Runs 2 steam engines 40 horse power each, and does a business of $65,000 per annum.

A. H. SEAVER occupies one room 20x20 feet, on third floor, in three story wooden building, located at No. 279 Main street, for the manufacture of silver ware. Commenced business in 1868; employs 1 hand.

A. LORIMER occupies wooden building 20x260 feet, located at the corner of Exchange and Blackstone streets, for the manufacture of cordage lines and twines. Commenced business in 1843; employs 6 hands; uses 2,500 lbs. of American, and 50 tons of Manilla hemp, 2,000 lbs. flax and 4,000 lbs. cotton yarn per annum.

O. BLOOD & SONS occupy a three story wooden building 30x60 feet with an ell 25 feet square, also a blacksmiths' shop connected 32x34 feet, located on Canal street, for the manufacture of carriages of all descriptions. Commenced business in 1856. Employ 15 hands and do a business of $20,000 per annum.

ETHAN ALLEN & Co. occupy a three-story brick building, 40x140 feet, located at Worcester Junction, for the manufacture of firearms and ammunition. The business was commenced in Grafton, Mass., in 1830, by Ethan Allen, afterwards carried on in Norwich, Conn., by Allen, Thurber & Co., and in 1847, moved to there present location under the firm name of Allen and Wheelock. In April 1866, the firm was changed to Ethan Allen & Co. This firm employ 100 hands; run a 50 horse power engine, built by the Corliss Steam Engine Co. of Providence, R. I., with a horizontal flue boiler 50 horse power, built by Goddard, Rice & Co. of Worcester, Mass.

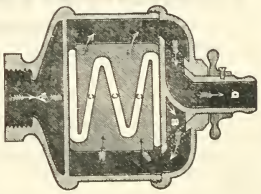
S. R. HEYWARD & Co. occupy four floors 40x100 feet, in four story brick building, located near the salesroom, 283 Main street, for the manufacture of hand made boots for the retail trade. Commenced business in 1866; employ 250 hands, and turn out 175 cases per week. Power furnished by a 15 horse power steam engine.

A. B. PROUTY occupies second floor 36x75 feet, in 2 story wooden building, on Webster square, for the manufacture of card setting and Essick knitting machines. Commenced business in 1865; number of employees, 15; machinery consists of 4 engine lathes, 4 lathe drills, 4 planers 1 upright drill.—Turns out 20 knitting machines per day.

JASON CHAPIN, Agent,

BRASS FOUNDRY

102 SUMMER STREET, WORCESTER, MASS.



AND MANUFACTURER OF

THE REVERSE CURRENT FILTER,

The BEST WATER FILTER KNOWN, having been tested for several years. It cleanses water from all impurities simply, thoroughly and effectually. The Reverse Current removes all the sediments in a few moments of time, thus making it a very durable and desirable filter for all using aqueduct water. For sale by the manufacturer, at

102 SUMMER STREET, WORCESTER, MASS.

A. B. Richardson & Co. occupies a 2½ story wooden building 50x80 feet, also 4 out wooden buildings 95x35, 40 x50, 24x28 and store houses occupying 18,000 square feet of land, located No. 1 Central street, for manufacturing the Buckeye mower and reaper machine. Commenced business in 1862; employ 35 hands; turn out 1,500 machines per annum. The machines used by this firm are 1 planer, 3 upright drills, 4 engine lathes, 6 drilling lathes, 2 punches. Runs a 30 horse power steam engine, manufactured by Hinckley & Drury of East Boston, with boiler 40 horse power, Hinckley & Williams patent.

C. C. Houghton occupies about 18,000 square feet of room in a 4 story brick building, located at No. 34 Southbridge street, for the manufacture of hand made boots of all kinds. Commenced business in 1853. Employs 200 hands and does business to the amount of $300,000 per annum.

Gifford & Ward occupy 1 room 22x30 feet on fourth floor in 4 story brick building, located at No. 10 Foster street, for the manufacture of novelty nail knife and ear spoon and gem scissors sharpener and cloth ripper combined. Commenced business in 1867, and has 5 employees and machinery adapted to the business.

J. Putnam occupies one room 20x35 feet, on second floor in brick building, located at No. 11 Cypress street, for the manufacture of woolen harness frames. Commenced business in 1853; employs 2 hands, and turns out 6,000 harness per annum. Machinery consists of 2 saw tables, 1 tenoning and 1 mortising machine.

Worcester Bleach & Dye Works, occupy a 2 story wooden building 80x30 feet and 1 out building 30x40 feet, located on Southgate street near the Adriatic Mfg. Company. Established in 1868; power furnished by a 4 horse power engine; 1 tubular boiler.

Jason Chapin, Agent, brass founder, occupies a wooden building and basement 35x67 feet, located at No. 102 Summer street. Commenced business in 1849; employs 8 hands, for the manufacture of brass and German silver castings of every description. Mr. C. has a capacity for doing the largest business of this kind in the city, he having 10 furnaces for melting. He is also sole agent and manufacturer of the reverse current water filter, the best water filter known, having been tested for several years. It cleanses water from all impurities, simply, thoroughly and effectually. The reverse current removes all the sediment in a few moments of time, thus making it a very durable filter for all aqueduct water.

Russ & Eddy occupy 7,500 feet of land, located at the corner of Manchester and Bridge streets, for the manufacture of all styles of wood mouldings. Commenced business in 1863. Employ 20 hands; use 400,000 feet of lumber per year, and for the year 1867 produced 2½ millions feet of brackets; run a stationary steam engine 20 horse power, built by the Fuller Iron Works of Providence, R. I. These mouldings are manufactured from one of Russ patent monitor moulding machines of Worcester, Mass. Warehouse 28 Summer street, Boston, Mass.

John L. Seaverns occupies 5 floors 64x300 feet, located on a line with the Boston and Albany Railroad at the old stand of Goddard, Rice & Co., for the manufacture of all kinds of paper machinery, heavy shafting, gearing and mill work. Commenced business in 1847. Employ from 60 to 100 hands, and during the last two years have used 40 tons of castings per week. Run a double engine 60 horse power, built by Adams of South Boston, with 2 boilers 50 horse power each, built by the late firm of Goddard, Rice & Co. of Worcester, Mass.

D. M. WOODWARD,

GRANITE CUTTER,

—AND DEALER IN—

HAMMERED GRANITE WORK,

For building Cemetery Lots, Monuments, &c.

YARD ON PLYMOUTH STREET,

Worcester, Mass.

D. M. Woodward occupies 16,000 feet of land located on Plymouth street, for the manufacture of hammered granite work for buildings, cemetery monuments, &c. Commenced business in 1854. Employs 20 hands, uses 200 feet of granite per week, and does a business of $30.000 per annum.

Samuel W. Kent occupies one room in third story of Merrifield's brick building 40x40 ft., located on Union street, for the manufacture of card machinery. Commenced business in 1835. Capital $2,000. Employ 5 hands; does a business of $5,000 per annum.

Frank Wesson occupies a 3 story brick building 50 x 65 feet, located at No. 2 Manchester street, for the manufacture of breech-loading shot guns and pistols. Commenced business in 1858. Capital, $20,000; employs 30 hands, turns out 3,000 rifles and pistols per year, doing a business of $75,000. The works are run by a steam engine of 20 horse power.

Bay State Shoe and Leather Co., occupy a wooden building, 4 stories and basement 40x120 feet, located on Austin street, for the manufacture of boots and shoes. Commenced business May 1st, 1866. Employ 375 hands, turn out 1400 pairs of shoes and 168 pairs of boots per day, using 125 sides of leather. An engine of 12 horse power with 2 tubular boilers, made by Hardee, of Albany, New York, furnish the power. Do a business of $800.000.

Albert Tainter occupies 2 floors in 2d story of a brick building, on Union street, for the manufacture of woolen machinery. Commenced business 1850, turns out 4 sets of machinery per month.

Arcade Malleable Iron Co., occupy about an acre of ground, located on Washington street, for the manufacture of malleable iron castings of every description, Commenced business in 1850. Employ 100 hands, run 1 of Tufts' steam engines, 8 horse power, of Boston, Mass., and 1 cylinder boiler. Do a business of upwards of $100.000 per annum. Warren McFarland is agent and proprietor of this Co.

Fitch & Winn occupy 1st floor of Merrifield's brick building, 40x50, located on Cypress street, for the manufacture of wheel spokes; commenced business in 1860.; employ 10 hands, do a business of $18,000 per annum. Turn out 1,400 spokes per day.

C. Whitcomb & Co. occupy lower floor 50x80 feet, in 3 story brick building, located at the corner of Cypress and Exchange streets, for the manufacture of machinists' tools and copying presses of all sizes. Commenced business in 1848; employ 25 hands. Capital, $20,000. Use about a ton of iron per day, run 14 engine lathes, 4 planers, 3 upright drills, gear cutters and the usual assortment of smaller tools.

J. Todd & Co. occupy two rooms 20x25, on third floor in three story brick building known as Merrifield's building, located on Union street, for the manufacture of coffee, pure spices and cream tartar. Commenced business in June, 1866, employ 3 hands, and run 1 run of stone, 1 coffee and spice mill and 1 roaster.

Adriatic Manufacturing Co. occupy a two story stone building 40x480, with wing 30x60 ft. with dye house 40x50 feet, bleach house 12x24 feet, waste house 24x50 feet, wool house 30x60 feet, machine shop 30x60 feet, dry house 30x 60 feet, located on Armory street, near the Norwich and Worcester Railroad, for the manufacture of all kinds of woolen cloths. Established January 1, 1864, and turn out 12,000 yards per week. Number of employees, 220. Machinery consists of 13 sets of cards, 22 jacks, 70 Crompton looms. Power furnished from an engine of the Corliss pattern, 160 horse power, with four tubular and two flue boilers.

D. H. Whittemore occupies three rooms 17x60 feet in brick building, located at No. 36 Southbridge street, for the manufacture of the Union apple paring machine, also, an apple paring, coreing and slicing machine, and peach parer. Commenced business in 1855. Employ 10 hands, have a capacity of turning out 2000 machines per week. These machines took the first premium at the New England Fair, in New Haven; the New Hampshire Fair at Manchester, and the fair at Hamilton, Canada West.

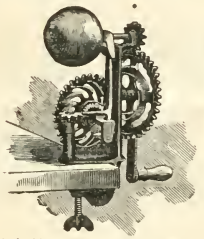
S. C. Andrew occupies a three story wooden building, with basement 38x100 feet, located at 84 Southbridge street, for the manufacture of boots and shoes of various kinds, for ladies' and gents' wear. Commenced business in 1861. Employs 200 hands, turns out 125 cases of boots and shoes per week.

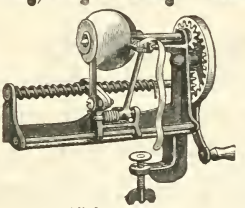
Worcester Needle Co. occupy a room 15x40 feet, in the second story of brick building, located at No. 46 Mechanic street, for the manufacture of sewing machine needles for dry and wax thread. Commenced business in April, 1868. W. Wilcox, E. Lathrop and J. W. Battelle constitute the company.

Towne & Co. occupy a room 40x44 feet, in the third story of brick building, located at No. 46 Mechanic street, for the manufacture of perforated card board and metals of all kinds. Commenced business in 1846; run 6 machines and employ 4 hands.

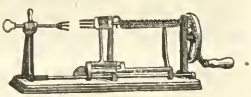
R. Ball & Co., occupy a 3 story brick building 40x100 feet with a wing 40x80 feet, and out buildings, located at No. 28 School street, for the manufacture of wood working machinery. Commenced business in 1836, and employ from 75 to 100 hands.

THE UNION APPLE PARER. Paring, Coring and Slicing Machine. PEACH PARER.





All done at once.



Also Pares

Apples and Potatoes.

This knife pares going both ways.

Manufactured by **D. H. WHITTEMORE.**

Nos. 36 & 38 Southbridge St., - - - WORCESTER, Mass.

HOWARD, FARNSWORTH & Co. occupy the first floor of brick building 40x50 feet, located on Washington Square, near Front street, for the manufacture of machine card clothing. Commenced business in 1867. Capital $8,000. Employ 4 hands; turn out 300 sheets of cotton and woolen cards per week; do a business amounting to $18,000 per annum; run a 9 horse power engine with 1 boiler made by Hobbs & Son, West Cambridge, Mass.

ALBERT GOULD occupies a three story wooden building, located in Burnside Court, for the manufacture of gents' boots. Commenced business in 1852. Manufacture about 75 pairs per day and has 25 employees.

THOMAS PEIRCE occupies rooms 20x70 feet in wooden building, located at No. 6 Southbridge street, for the manufacture of men's, boys' and youths' thick boots. Commenced business in 1866. Has 15 employees and turns out 10 cases per week.

S. J. PEASE occupies a room 30x75 feet, in brick building, located at No. 7 Cypress street, for the manufacture of boot and shoe machinery. Commenced business in 1863. Employs 8 hands, and does a business of $10,000 per annum.

WORCESTER SILK CO. occupy two floors 30x70 feet, in 4 story wooden building, located at No. 1 May street, for the manufacture of machine silk twist, adapted for the shoe and tailors' trade. Commenced business, June, 1868; employ 40 hands, and half the power of a 25 horse power steam engine, built by Brown, of Fitchburg, Mass., and turn out 100 lbs. of finished spool and skein silk per week. The company consists of Smyth & Bros. & Co. and Geo. R. Kennedy, of which company Mr. Kenedy is agent.

C. H. FITCH & Co. occupy 4 floors 50x60 feet with basement in brick building located on Front street, for the manufacture of men's, boys' and youths' calf, kip, grain and gents' boots. The business was first commenced by Mr. C. H. Fitch in 1848. The company employ 100 hands, and turn out 5,000 cases per annum; doing a business of $150,000.

KNIFFEN MOWING MACHINE CO. occupy 1 room in third floor of brick building, located No. 12 Central street, for the manufacture of mowing machines and horse rakes. Commenced business 1866. Capital $50,000. Employ 50 hands, turn out 1,000 machines, and 1,000 horse rakes per year. Do a business of $125,000 per year. It is run by a 25 horse power engine,—2 boilers,—made by Putnam Machine Co., Fitchburg, Mass.

CHAMBERLAIN & BAKER, occupy third floor 30x50 feet, in a 3 story brick building, located at the corner of Exchange and Union streets, for the manufacture of coffees and spices, chocolates and cream tartar. Commenced business June, 1868; employ 3 hands, and run 1 run of stone, 1 iron mill, 1 roaster.

JARVIS HOWE & Co. occupy 1 room 30x40 feet on third floor in brick building, located at 51 Exchange street, for the manufacture of patent boot trees. Commenced business April, 1867; employ 2 hands and turn out 2 sets per week. Machinery consists of 1 engine lathe, 1 saw and scouring apparatus.

C. G. REED & Co. occupy a 2 story wooden building 40 feet square, and 3 floors in adjacent building containing about 8,000 square feet, located at No. 54 Union street, for the manufacturing of wooden wheels and spokes. Commenced business in 1849, and has 18 employees and machinery adapted to business; turn out 1,300 set per annum.

E. A. MUZZY & Co. occupy 3 floors 34x70 feet in 4 story brick building, located at No. 305 Main street, for the manufacture of hand made shoes. Commenced business 1865; employ 50 hands and turn out 1,000 cases per annum.

GEORGE E. KIRBY & Co. occupy 1 room 30x30 on 2d floor in 2 story wooden building, located at 233 Main street, for the manufacture of whips. Commenced business May, 1868; employ 3 hands; turn out 4 dozen per week.

F. B. NORTON & Co. occupy a 2 story wooden building, 110x30, located on Water street. Commenced business in 1858. Capital $10,000. Employ 9 hands, for the manufacture of stone ware of every description. Works are run by a 7 horse power engine, with 1 boiler, made by Bellows & Whitcomb, of this place. Do a business of $18,000 per annum.

THE UNION IRON WORKS, Rice & Whitcomb, proprietors, occupy a room 40x75 feet, on the lower floor of Merrifield's building, located at No. 11 Cypress street, for the manufacture of Taft's patent power and hand shears, of all sizes, and boiler rolls. Commenced business in 1855; employ 12 hands. Capital, $20,000.

JOSIAH RICE occupies 2d story of wooden building 23x35 feet, located at corner Main and Pleasant streets, for the manufacture of hand saws of every description. Commenced business in 1837; capital $2,000; does a business of $5,000 per annum.

J. S. WHEELER & COMPANY,

Manufacturers of

MACHINISTS' TOOLS,

Lathes, Planers, Upright Drills, Chucks, Shafting, Hangers,

Patterns, Models, etc.

NO. 3 HERMON ST., Worcester, Mass.

☞ All kinds of Job Work done to order.

J. S. Wheeler & Co., occupy lower floor 50x100 feet, of 2 story brick building, located at No. 3 Hermon street, for the manufacture of machinists' tools of all kinds; such as lathes, planers, gear cutters, chucks, &c. Commenced business in October, 1867. Employ 10 hands; run 4 engine lathes, 1 planer, 1 upright drill, 1 slotting machine, 1 gear cutter and 1 chuck lathe. Run a 30 horse power engine, built by C. H. Brown, of Fitchburg, Mass.

E. A. Harwood & Co. occupy 2 rooms in brick building known as Foster's block,—one 20 x 30, and one 30 x 15. Commenced business 1868. Capital, $2,000. Employ 3 hands, for the manufacture of gold and silver plated carriage and harness trimmings. This manufactory is run by a 10 horse power engine.

Ashworth & Jones occupy a 2 story wooden building and basement 35x110 feet, dye house a 1 story wooden building, with basement, 20x50 feet, a 2 story brick building 35x35; brick wheel house 25x25 feet; store house, a 2 story wooden building 25x30 feet; located at Valley Falls for the manufacture of Union beavers. Commenced business April, 1862. Number of employees 30. Machinery consists of 2 sets of Union beaver machinery, turn out 4700 yards per month, and use stock to the amount of 2000 lbs. per week. Power furnished by a 45 horse power breast water wheel.

R. Wesson, Jr., occupies a 3 story wooden building 30x 40 feet, for the manufacture of shoes. Commenced business in 1848. Manufactures 1200 pairs shoes per week, does a business of $100,000 per annum.

H. Converse occupies 2d story of brick building 24x87 feet, located at 270½ Main street, for the manufacture of fancy and paper boxes of all kinds, such as shelf and shoe boxes and wedding cake boxes. He employs 12 hands. Commenced business in 1866, turns out 1000 boxes per day, does a business of $10,000 per annum.

Wells & Rice, occupy a wooden 1 story building 25x50 feet, located at 24 Foster street, for the manufacturing of brass and composition castings. Commenced business in January 1867; capital $5,000; employ 6 hands, use 2,000 lbs. of copper and zinc per month; do a business of $20,000 per annum.

C. W. Hamilton & Co., occupy 4 stories of a wooden building 60x40 feet, located on Water street. Commenced business in 1864. Capital $25,000; employ 20 hands for the manufacture of tapes and bindings; run 13 looms; run by a 15 horse power engine, Corliss pattern, made by Wm. A. Harris, has 1 flue boiler; turn out 75 gross per day.

Worcester Card Factory, T. K. Earle, Proprietor, occupy 5 floors of a 4 story brick building 40x180 feet, located on Grafton street, near the Boston & Albany Railroad depot, for the manufacture of machine card clothing. Commenced business in 1842; employ 50 hands, and, in 1866, cut up 26,000 sides of upper leather, run 150 machines, and the production of 1866 was worth $300,000. This Co. received a premium from the World's Fair in Europe, and have taken premiums of several silver medals from most of the institutions in the United States. Run a 25 horse power engine, built by the Putnam Machine Co., of Fitchburg, Mass., with one tubular boiler, built by Rice, Barton & Co., of Worcester, Mass. Also, a Harrison boiler, built at Philadelphia, Penn. This firm consume 75 tons of wire annually.

H. B. Hubbard occupies 3 floors of a wooden building, 25x40, located at No. 6 Hermon street, for the manufacture of boots and shoes. Commenced business in 1862; employs 20 hands, turns out 50 cases boots and shoes per week, and uses 60 sides of leather.

E. C. Grinnell & Co. occupy a wooden building 96x52 feet, 4 stories, located on Austin street, for the manufacture of men's and boys' boots. Commenced business 1850; employ 300 hands; turn out 1,000 cases boots, and use 2,000 sides of leather per month; run a steam engine of 10 horse power, built by Leavitt of Boston, Mass.; use 1 boiler built by Harrison of Philadelphia, Penn.; do a business $300,000 per annum.

Rice, Griffin & Co. occupy the 2d and 3d floors of brick building 45x200, located in what is known as Merrifield's building on Union street, for the manufacture mouldings, sash, doors and blinds. Commenced business in 1866. Capital $10,000. Employ 22 hands; do a business of $60,000 per annum. These works are run by a 300 horse power engine, located in a building adjacent.

Graton & Knight occupy 4 rooms 20 x 60 feet, in brick building, located at 37 Front street, for the manufacture of leather belting of all sizes. Commenced business in 1861; employ 22 hands, and cut up about 150 hides per week, and do a business of $100,000 per year. This firm also have a tannery on the Bloomingdale road, near the Western Railroad depot, 42 x 82 feet, 2 stories, and French roof, with a hide house, 24x40feet, 2½ stories. Run by 1 of R. W. Pratt & Co.'s steam engines, 25 horse power, built at Boston.

Heald, Britton & Ford occupy a wooden building 45x 100 feet, with an L 22x30 feet; also a store house 90x40 ft. located on Foundry street, near the Western Railroad, for the manufacture of all kinds of machinery and castings. Commenced business in July, 1865; employ 20 hands; consume about 400 tons of iron per year, use one of Rice, Barton & Fales' steam engines of 16 horse power, manufactured in this city. Do a business of $45,000 per annum.

PIONEER CAR ESTABLISHMENT OF THE UNITED STATES.

ESTABLISHED IN 1832.

OSGOOD BRADLEY, PROPRIETOR,

CRAFTON STREET, WORCESTER, MASS.

BUILDER OF

STEAM RAILWAY AND STREET CARS

OF ALL DESCRIPTIONS.

ISAAC D. MATHEWS occupies a room 40 feet square, on the lower floor of a brick building, located at No. 54 Main street, for the manufacture of machinists' tools, independent extension jaw screw chucks, shafting, pulleys, &c. Commenced business in 1862. Machinery used in the works is 3 engine lathes, 1 planer, 1 boring mill, 1 upright drill, 1 bolt cutter, besides various smaller tools.

GEORGE T. ATCHINSON occupies 4 wooden buildings, each 40x190 feet, located on Exchange street. Commenced business in 1852; employs 24 hands, for the manufacture of omnibuses, express and job wagons, carryalls, chaises, phætons, top and open buggies. Also, repairing of all kinds done. Turns out 5 to 10 carriages per month. Power furnished by an 80 horse power engine, Lombard's patent.

C. & J. A. COLVIN occupy a wooden building 50x90 feet, with a wing 40x75 feet, as a foundry; also, a pattern shop and office 30x40 feet, located on Gold street, near Washington, for the manufacture of iron castings of every description. Commenced business in 1865; employ 25 hands, turn out 75 tons of castings per month. Run a steam engine 7 horse power, with 1 tubular boiler 10 horse power, manufactured by Bellows & Whitcomb of this city.

ALZIRUS BROWN occupies 3 floors of brick building 40 x 90, located on Union street. Commenced business 1854. Capital $50,000. Employs 75 hands, turns out 1,000 mowing machines and 1,500 rakes per year. Does a business of $100,000 per year. Office corner Central and Union streets.

SAMUEL PORTER occupies 1 room on 3d floor of brick building 40x60 feet, located in Merrifield's building, Union street, for the manufacturing of boot and shoe lasts. Commenced business in 1866. Capital $5,000. Employs 10 hands; turns out 700 lasts per week; does a business of $20,000 per annum.

J. BARRETT & CO. occupy 1 room in 2d story of Merrifield's brick building 50x50, located at No. 9 Cypress streets, for the manufacturing of calico printing machinery and jobbing. Commenced business, 1867. Employ 5 hands; do a business of $20,000 per annum.

OSGOOD BRADLEY occupies buildings covering 76,500 square feet of ground, located on Grafton st., for the manufacture of railway and street cars, of all descriptions. Established in 1832 by Osgood Bradley, the oldest car builder in the United States. These works employ from 80 to 120 men, and turn out annually, 52 passenger cars, 350 freight cars, and every thing pertaining thereto. Run a 100 horse power engine, built by Nagle & Weed, of Buffalo, N. Y., with one tubular boiler, 16 feet 5 inches in length, and 5 feet in diameter; a 60 horse power boiler, and contains 122 tubes.

A. BANGS & CO. occupy the 1st floor of wooden building 23x40 feet, located on corner Cypress and Foster streets, for the manufacturing of eave troughs, gutters and conductors. Commenced business in 1859. Capital $2,000; employ 3 hands; do a business of $6,000 per annum.

N. G. TUCKER occupies a 3 story wooden building 84x63, as a practical plumber; run by water power; does a business of $15,000 per annum.

BLAKE BROS. occupy 1st floor of brick building 60x30 feet, located on Union, corner Exchange street, for the manufacturing of patent moulding machines. Commenced business, 1856. Capital $4,000. Employ 10 men; do a business of $28,000 per year; turn out 4 machines per month. These works are run by a 300 horse power engine, located in a building adjacent.

S. MAWHINNEY occupies 3d floor of brick building 40x96, located in Merrifield's building, Union street, for the manufacturing of boots and shoe lasts. Commenced business 1855. Capital $10,000. Employs 20 hands; turns out 4,500 lasts per month; does a business of $40,000 per annum.

GEO. A. KIMBALL & CO., satinet manufacturers, commenced business in 1868. Their works are situated in Valley Falls, and consist of three buildings, as follows:—Main building 35x60, four stories of brick; office and store house, 18x30, one story, frame; dye house, 18x30, one story frame; run two sets machinery, employ 22 hands, producing 3,200 yards per week. Consume 2,200 pounds wool and cotton. The motive power is furnished from a 35 horse power Jonval wheel, made by Rice, Barton & Fales.

ISAAC D. MATHEWS,

Manufacturer of

MACHINISTS' TOOLS,

Independent Extension Jaw Screw Chucks. Machine Jobbing in all its various branches.

Shop on Union Street, Worcester, Mass.,

Opposite John Gates' Lumber Yard.

WORCESTER SKIRT COMPANY,

—MANUFACTURERS OF—

Hoop Skirts,

—AND THE—

Celebrated Alamode Corsets,

AND JOBBERS OF LADIES' AND CENTS'

Paper Collars, Cuffs, etc.

No. 270 Main Street, - - - Worcester, Mass.

WORCESTER SKIRT COMPANY, D. H. Fanning, Proprietor, occupy a 4 story brick building 40x90 feet, for the manufacture of hoop skirts and corsets, located at 270 Main street. Commenced business in 1861. Employ 125 hands. Turn out 8000 dozen corsets and 6000 dozen skirts per year, do a business of $200,000 per year.

SOUTHWICK & HASTINGS, occupy a room 25x40 feet, in a 3 story brick building, located at No. 7 Cypress street, for the manufacture of Jillson's patent combination caliper and dividers, Livermore's patent screw rivets, ware points and tenons, and Clemence's patent garment supporters. The screen rivet made by this firm claims to be superior to others for the following reasons, viz.: That in putting together belts with but ⅛ or ¼ the number which would be required of copper rivets a much stronger connection is made. That used in place of lacing &c. for butting belts, they wear longer, hold firmer than any other fastening, and unless the leather is rotten, the security against breaking is complete. The combination caliper, made by them, is three complete tools combined in one, namely: inside and outside calipers, and dividers, making the most complete and convenient tool in market. This firm commenced business in 1865, and employ 5 hands.

C. HENRY WHITCOMB & CO. occupy a 3 story brick building with basement, 40x100, for the manufacture of all styles and kinds of envelopes. Established, 1864.

ALBERT CURTIS occupies a 3 story brick building with wooden addition 36x60, for the manufacture of woolen satinets. His machinery consists of 2 sets cards, spinning frames and looms. Employs 24 hands. His machinery is driven by a 24 horse power iron wheel, made by J. L. Upham, Worcester. Mr. Curtis also manufactures sheetings, occupying a 2 story brick building 44x84; runs 2,800 spindles, 64 looms; employs 46 hands, and produces 250 cuts per week. Power at this mill is derived from a 80 horse power breast wheel. Mr. Curtis established these 2 mills in 1846. They are situated in New Worcester, on Webster Square. About half a mile from the Square, at a mill known as the "Trowbridge Mill," established in 1852. This mill is 2 story frame 30x108, and is used for the manufacture of sheetings. Employs 40 hands; run 2,300 spindles, 52 looms, 1 lapper and picker. This mill produces 10,000 yards per week. The motive power is furnished from a 50 horse power iron wheel, Vandewater's patent, built by Rice & Barton of Worcester.

WASHBURN & MOEN MANUFACTURING CO. This company is a consolidation of the I. Washburn and Moen Wire Works, established in 1836, and the Quinsigamond Iron and Wire Works, established in 1846. The officers are, Philip L. Moen, President; Wm. E. Rice, Treasurer; Chas. F. Washburn, Secretary. They occupy in their three different establishments, all located in this city, 544,000 square feet of floor room, or about 12½ acres. To drive their works they use a capacity of 1,300 horse power steam, and 130 horse power water. The company own 104 tenements, and employ from 900 to 1,000 hands. Their productions are iron and steel wire, of every description, round iron and wire rods.

THE WASHBURN STEAM ENGINE WORKS occupy a room 100x25 ft., in a 2 story brick building, located at No. 3 Hermon street, and manufacture George I. Washburn's patent portable steam engines and condensing steam engines and pumps. The Washburn steam engine is an object of interest to all who have seen it. It is very compact; in fact, it could almost be covered by a barrel, and is not liable to get out of order. The construction of this engine is novel. Two pistons are employed which work in cylinders arranged in vertical positions. Each piston has attached to it a "piston"

TATEUM & HORGAN,

MANUFACTURERS OF ALL KINDS OF

CEMETERY

AND

FURNITURE WORK,

Of the Latest and most approved Styles.

CORNER OF FRONT & TRUMBULL STS.,

WORCESTER, MASS.

☞ Designing, Modeling and Drawing done to order, at the lowest cash prices, at short notice.

valve, which controls the action of the steam upon the other piston. The stroke of the piston is short, consequently short connections are used between the piston rods and the crank shaft. An ingenious mode is adopted to utilize the heat from the steam after it has passed the cylinder, by employing it to heat the water before it passes into the boiler. One of the first of these engines built at these works was purchased by J. A. Cunningham, of North Brookfield, and has been used in his boot manufactory for the past 4 years, running 10 hours a day, and continues to give perfect satisfaction.

Tateum & Horgan occupy 2 floors 60 x 80 feet, in building located at the corner of Front & Trumbull streets, for the manufacture of stone work, such as building, cemetery and furniture work. Commenced business in 1855; employ 30 hands, consume $15,000 worth of granite, marble and freestone per annum. This company were awarded a bronze medal at the fifth exhibition of the Worcester County Mechanics Fair, in 1866, for specimens of ornamental work made by them.

L. D. Fay, manufacturer and dealer in machinist's tools, milling machines, and wood working machinery. The shop where machinists' tools are built is located in Worcester, occupying 1600 square feet of the first story of Merrifield's Building. He uses six engine lathes, an iron planer, upright drill, and other tools especially adapted to this branch of manufactures. The wood working machinery is made mostly by the Patentees or Proprietors of Patents, and at other shops made at various places.

J. A. Fay & Co., originally J. A. & G. W. Fay, uncle and father of L. D. Fay, commenced business in 1827, and were the pioneers in the manufacture of Improved wood working tools in the United States, which are now so extensively known, and used in nearly all nations. In 1854 they were the proprietors of five large shops, three of them located in New England, and in the West, and one in Old England. But the death of J. H. Fay, which occurred in this year, caused a general division in the business, each shop continuing as a new firm, independent of the others. G. W. Fay died in 1867. Josiah Fay, another brother, once the active partner of the firm Fay, Fisher & Co., makers of Improved wood working tools, is now past the years of business, so that at the present time, no representative of the name remains except the subject of the present article.

The building of the Earle Stove Company, in which are manufactured stoves, furnaces, and other kinds of heating apparatus, on the Discovery patent and in other styles, is well worth a visit. It was erected a little more than two years since, in a most thorough and substantial manner. It is 300 feet long by 60 feet wide, and is four stories high for one-third of its length. We must ascend to the upper story, if we wish to begin the inspection with the first processes, for here is located the pattern room, where workmen are constantly engaged in cutting out new designs and bringing their work to the needed perfection of regularity and smoothness. In the next story below, are stored the finished goods. Here, also, is a room for the tin workers, and a turning-room with its lathes. In the second story we find the mounting-room, in which the stoves and furnaces are set up, a room for drying and grinding the sand used in the moulds, and machinery for performing the nice work of finishing the iron patterns. Here, also, we find the directors' room, finished plainly and neatly; the sample room, containing a fine exhibition of the work done in the establishment; and the office, which is a model of convenience.

Reaching the basement, we come to the carpenter's shop, in which the flasks and mould-boards are prepared. Near by is the wire room, where the sand is brushed from the

A. J. HISCOX,

MANUFACTURER OF ALL KINDS

CAST STEEL HAND-CUT

Files and Rasps,

No. 132 Middlesex Street,

LOWELL, MASS.,

And No. 10 Central Street, Worcester, Mass.

Old Files Re-Cut!

castings; also a room for grinding those parts of the castings which it is desirable should be made smooth. A part of this work is done in large revolving cylinders, and a large vulcanized rubber grinder, moving at the rate of 5,000 feet per minute, is also used for this purpose. The packing room is also located in this part of the building and an elevator capable of sustaining four tons weight travels from the basement to the upper story.

The engine which drives all the machinery of the establishment was made by the Putnam Machine Company. It is located in the basement, and derives its motive power from a Harrison boiler placed in a separate building. Visitors are here shown the operation of the new apparatus, and are unanimous in their expressions of delight at the great beauty of the spectacle formed by the gas issuing from the perforations in the walls of the fire chamber. An exact account of the fuel used each day is kept by the engineer.

Entering the foundry, which covers a large area of ground, and, though having but one story, is lofty and well lighted, we see a great variety of work going on, not only in the casting of furnaces and stoves, but of piano plates and many other articles requiring great skill. The moulds, opened and unopened, cover nearly the whole of the vast place, and the place affords great information and interest to an uninitiated spectator. The capacity of the melting cupola is about 12 tons, or five tons per hour. Two revolving grinders cleanse the old iron to be melted. A convenient wash-room is provided for the foundry men, and many other conveniences are furnished for their comfort.

The arrangements for taking in the sand, iron and coal used in the establishment, and for sending out the finished productions are admirable, and save much carting, tracks running from the building to the Providence and Worcester Railroad, which pass within two rods of the establishment.

The company manufacture many styles and sizes of furnaces and stoves, constructed on the new principle, as well as others having direct draft. Their furnaces for setting in brick work are placed on rollers, so that they can be drawn out of their places for repairs without trouble. They make 4 sizes of Discovery portable furnaces, the smallest capable of heating 4 rooms of ordinary size, and the largest having a capacity sufficient for heating 10 or 12 rooms. They make also 4 sizes of the Union stove on the Discovery principle, and handsome stoves called "Consul" and "O. K." with direct draft. The testimonials which have been received from persons using their stoves and furnaces, express the most unqualified praise, on the score of safety, economy and ease of management. Their "City of Worcester" cooking stoves have taken a high rank in the kitchens of the land, and whether constructed with or without "combustion," have met with a success quite remarkable. They are made of several sizes, with large and thoroughly ventilated ovens, and are noted for their economy in the consumption of fuel, whether burning wood or coal. The company have perfected a style of iron sink, with a sliding tray, which gives great satisfaction. One remarkable characteristic of all their castings is their smoothness and accuracy.

The company have expended large sums of money in perfecting their designs. Their salesrooms in Boston are at Messrs. Warren & Gleason's, 82 North street, where parties whose interest or curiosity prompts them to examine the manufactures of the company can have the opportunity of doing so.

At Northville 1½ miles from the centre of Worcester, are the following Manufacturers:

B. Daniels & Brothers occupy a 5 story brick building 80x40 feet, for the manufacture of cotton warp and yarn.

A. BALLOU & SON,

MANUFACTURERS OF

COTTON AND WOOLEN

SPINDLES,

OF ALL DESCRIPTIONS,

WORCESTER. - - MASS.

Commenced business in 1865. Employ 25 hands; use 2200 pounds cotton, turn out 21,000 yards cotton warp per week; run 2200 spindles by a breast water wheel, 24 feet in diameter, 16 feet long.

A. Ballou & Son, occupy a 3 story wooden building 75x40 feet, for the manufacture of cotton and woolen spindles of every description. Commenced business in 1863; employ eighteen hands; use one ton of steel; turn out 8,000 spindles per month; run 20 lathes, by water power with a wheel 16 feet long and 12 feet diameter.

Leicester, 6 miles from Worcester. A village and town on the height of ground between Boston harbor and Connecticut river. It was first settled in 1713, and incorporated about the year 1721. Its Indian name was Toutaid. The town is well watered by French river and branches of Connecticut and Blackstone, which rise here. This town is noted for having one of the oldest academies in the United States. Leicester Academy established 1780: it has 100 pupils. The place has 4 churches and 2,500 inhabitants.

H. G. Kittredge & Co., occupy a 2 story wooden building 35x50 with ell, being a 1 story wooden building 22x22 feet, for picker room, also, wooden building for store room, 20x40. Located at Cherry Valley, Leicester, for the manufacture of satinets. Commenced business November, 1867, have 13 employees and one set of satinet machinery; turn out 8000 yards per month, and use stock to the amount of 3800 pounds per month. Power furnished by a 10 horse power breast wheel.

Eli Collier occupies 2 story wooden buildings 34x44 feet, and 1 story building 20x30 feet for picker house. Store house a 1 story wooden building, 18x22 feet. Located at Cherry Valley, Leicester, for the manufacture of woolen yarn. Commenced business in 1846. Has 6 employees, 1 set woolen yarn machinery. Turns out 1200 pounds per week. Power furnished by a United Statess iron water wheel, built by J. L. Upham, of Worcester, Mass.

Bisco & Denny occupy a 3 story wooden building and basement 24x108. Located on Main street, Leceister, for manufacture of machine cards. Commenced business in the 1826, have 15 employees, 60 machines and cut up 10,000 sides of leather per annum. Power furnished by a 5 horse power steam engine.

J. & L. Woodcock & Co. occupy a 2 story wooden building 32x90 feet, located at Leicester, for the manufacture of machine cards. Commenced business 1830; have 5 employees and 48 machines; cut up about 6,000 sides of card leather per annum. Power furnished by a hot air engine.

W. & J. Whittemore occupy a 2 story wooden building 36x60 feet, located on Main street, Leicester, for the manufacture of machine cards of every description. Commenced business in 1842; have 5 employees, 40 machines, and turn out 40,000 square feet of card clothing per annum, when running full time, and cut up 6,500 sides of card leather. Power furnished by a 6 horse power steam engine, built at Fitchburg, Mass.

A. White & Son occupy a 2 story wooden building 24x120 feet, located on Main street, Leicester, for the manufacture of cotton and wool machine card clothing of every description. Commenced business in 1836; have 8 employees and 43 machines; manufacture 50,600 square feet card

B. DANIELS & BROTHERS,

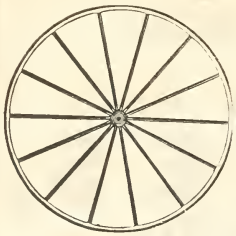
—MANUFACTURERS OF—

Cotton Warp and Yarns,

WORCESTER, MASS.

—o—

J. M. DANIELS, Agent.



B. I. PEABODY,

Manufacturer of and Dealer in

Carriage Wheels

HUBS, SPOKES, RIMS,

SEATS, BOWS, PLANK, ETC.

Salesrooms at

72 Kilby Street, Boston.

Manufactory at

WORCESTER, MASS.

clothing, and cut up 10,000 sides of leather per annum. Power furnished by a 5 horse power steam engine, built by Tyler, of Springfield, Mass., and 1 tubular boiler, 12 horse power.

L. S. Watson & Co. occupy a two story wooden building and basement 25x100 feet; two wooden buildings for store houses 30x75 each, located on Main street, Leicester, Mass. for the manufacture of cotton and wool hand cards. Commenced business in 1843; have 15 employees, 50 machines, 4 horse power hot air Erricson's patent, and one 6 horse power steam engine, built by Campbell & Whittier, of Roxbury, Mass., and one tubular boiler 25 horse power.

Stone & Bottomly occupy a 2½ story wooden building 40x80 feet, and 4 one story wooden buildings, namely: Dye-house 16x24 feet; dry house, 20x30 feet; store house, 16x50 feet; picker house 18x20, located at Cherry Valley, Leicester, for the manufacture of woolen satinets. Commenced business in September, 1865; having 22 employees; machinery consists of two sets of satinet machinery; turn out 3,000 yards, and consume stock to the amount of 2,000 lbs. per week. Power furnished by a 30 horse power iron turbine water wheel, Warren's patent.

Sargent & Whittemore Hand Card Co. occupy a 2 story brick building 40x90 feet, with basement 40x50. Located on Main street, Leicester, for the manufacture of hand cards. Business was commenced by Mr. Sargent a number of years ago. Has 40 employees, and 80 machines, and turn out 150 dozen pair per day. Power furnished by a 25 horse power breast water wheel, have also a oscillating steam engine, 5 horse power, William D. Andrews' patent. Manufactured by Andrews of New York.

The Atlantic Screw Co. E. A. Bagley & Co., Proprietors, 12 Central street, are manufacturers of all kinds of machine screws. They occupy a building at the above number, where they employ quite a number of persons making their screws from the best bar iron—milled and not forged—also machine, hand and blacksmith taps from the best of tool steel. The aim of this company is to make a good article at fair remuneration. How well they have succeeded is shown by their large and increasing trade throughout New England and the West.

B. I. Peabody occupies 2 stories of brick building 100x40, located corner of Cypress and Foster sts; also, 4 wooden store houses, 30x40, located on Cypress street. Commenced business 1864; employ 25 hands, for the manufacture of carriage wheels of every description. Turns out 75 sets of wheels per week. He has a salesroom at 72 Kilby street, Boston, Mass. Does a business of $100,000 per annum.

Cherry Valley Manufacturing Company occupy 3 story brick building with wing, main building, 100x40 feet, wing 50x50 feet; 2 story wooden building and basement 40x50 feet for a shoddy mill; brick dye and dry house 25x70 feet; 1½ story wooden building, 40x40 for store house, and 1 story wooden building 25x70 feet for office and storage. Located in Cherry Valley, Leicester, for the manufacture of fancy cassimeres and cotton warp. Incor. February, 1868. Have 100 employees; 4 sets of cassimere machinery, turn out 20,000 yards per month. Power supplied by a 40 horse power breast water wheel.

J. & J. Murdock, occupy a 2 story wooden building 36x200 feet, and basement 35x150 feet, located on Main street, Leicester, for the manufacture of machine card clothing of every description, for cotton and woolen machinery. Commenced business in 1840; have 25 employees and 112 machines, and turn out 125,000 square feet of card clothing, and cut up 20,000 sides of leather per annum. Power furnished by a 25 horse power steam engine, Corliss' patent, built by W. A. Harris, Providence, R. I., and 1 tubular boiler, built by Rice, Barton & Fales, of Worcester, Mass.; also, added to their business, September, 1868, a currier shop in basement of main building; employing 5 hands, and finishing 400 sides card leather weekly.

Mann & Marshall, occupy a 2½ story wooden building 30x70 feet; also, 3 story wooden building 40x50 feet for store house, located in Mannville, Leicester, for the manufacture of satinets. Commenced business in 1853. Have 25 employees, 2 sets of satinet machinery; turn out 2,500 yards per week, and use clean stock to the amount

ATLANTIC SCREW COMPANY,

MANUFACTURE ALL KINDS OF

MACHINE SCREWS,

FROM THE BEST BAR IRON.

No common refined Iron used in our work. Our Screws are all milled from the bars, not forged. We also manufacture Machine, Hand, and Blacksmiths' Taps, from best tool Steel.

E. A. BAGLEY & Co., 12 Central St., Worcester, Mass.

ELLIS THAYER,

Manufacturer of

BRUSHES!

OF ALL KINDS.

Particular attention given to MACHINE and DRESSER BRUSHES. Also to the Manufacture of THAYER'S patent FLEXIBLE PAINT BRUSH, which is superior to all others. They are ready for immediate use, no winding being necessary, as they are made with a Flexible Band, extending down upon the bristles, which can be removed to suit the convenience of the workmen. Also Manufacturer of Wipers for Rifles, Sporting Guns, &c.

ELLIS THAYER,

No. 66 Southbridge Street, Worcester, Mass.

of 2,000 lbs. per week. Power furnished by a 40 horse power breast water wheel. This mill is 6 miles from Worcester Center.

S. L. Hodges occupies a 3 story brick mill 36x125, and 3 story brick building 36x36 feet for dyeing and drying, and other buildings, consisting of machine shop, store house, office, boiler house, drug house and gas works, gasometer sufficient to hold 6,000 feet of gas, located at Cherry Valley, Leicester, for the manufacture of tweeds; has 75 employees, 5 sets of tweed machinery, and turns out 3,000 yards per week, and consumes wool to the amount of 275,000 lbs. per annum. Power furnished by a 75 horse power Tyler water wheel, also 2 tubular boilers used for dyeing and heating purposes, built by the Swamscot Machine Co. of South Newmarket, N. H.

Ellis Thayer is the largest manufacture of brushes in Worcester. His works are located at No. 66 Southbridge street, where are kept employed about 25 persons, in the manufacture of all kinds of brushes. Mr. T. gives especial attention to the manufacture of machine and dresser brushes for the many manufacturing concerns that are situated in New England, and of which he contributes much to supplying them with this indispensable article for cleaning and keeping in repair their machinery. Mr. Thayer is now introducing his patent brushes for painters' use, of which he has sold several thousands. Painters find them invaluable for their purpose, and they are coming into very general use. They are made with a flexible band extending down upon the bristles, which can be removed to suit the convenience of the workman. An engine drives his machinery.

G. N. & J. A. Smith, occupy 2 three story brick buildings 38x50 and 38x88 attached with ell, 38x50, for dye and boiler house, also 2 story stone building 33x75, for store house, located at Cherry Valley, Leicester, for the manufacture of fancy cassimeres. This firm was incorporated in 1865. Have 90 employees, 4 sets of fancy cassimere machinery; turn out 5,000 yards per week, and use stock to the amount of 6,000 lbs. per week. Power furnished by a Swain iron water wheel 50 horse power, also 60 horse power steam engine, Babcock and Wilcox patent, built by the Hope Iron Works of Providence, R. I.

Woodcock, Knight & Company occupy a 2 story wooden building 36x100 feet with ell attached 26 feet square on Central street, rear of Congregational Church, in the town of Leicester, for the manufacture of machine card clothing of every description. This firm has been in operation for a number of years; has 11 employees, and 75 machines, and cuts up about 12,000 sides of leather per annum. Power furnished by a 6 horse power steam engine, built by Campbell, Whittier & Co., Roxbury, Mass., and 1 tubular boiler, 10 horse power. Water supplied by one of Knowles' patent pumps and feeder.

Eight Miles North West from Worcester in the town of Holden. Alfred Morse has a mill here, his residence being at Farnumsville, on the Providence and Worcester Railroad. (See Farnumsville.) The mill is one mile from the Post Office, runs 5,000 spindles, 120 looms, consuming 800 pounds of cotton per day, and producing 21,000 yards of light yard wide sheetings. The power is furnished by one 26 feet breast wheel, the fall being 25 feet.

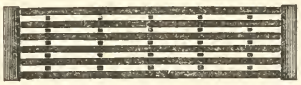
Wyoming, 6 miles from Boston and 21 from Lawrence. A flag station on the Boston and Maine Railroad.

Yarmouth, situated near the Cape Cod Bay, at the junction of the Cape Cod Central and Cape Cod Railroads. The former road is now owned by the latter. Yarmouth village including Yarmouth Port, a village adjoining, contains about 1,500 inhabitants and 3 churches. Yarmouth, like all the other towns on the Cape, is more or less engaged in the fisheries, situated 75¾ miles from Boston, 41½ from Middleboro', and 4 from Hyannis.

Zoar, 82 miles from Fitchburg and 4 from Hoosac Tunnel. A village on the Deerfield river, containing about 100 inhabitants, and on the Vermont and Massachusetts Railroad.

STERRY SMITH'S

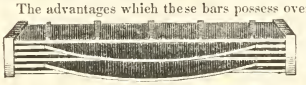
FURNACE GRATE BAR !



FOR STEAMSHIPS, STEAMBOATS,

Locomotives, Stationary Furnaces, &c. &c.

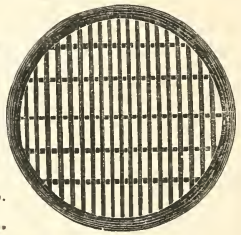
PATENTED, OCTOBER 2d, 1866.



The advantages which these bars possess over others is in their combination and the distribution of the metal in such a manner that there is no possibility of their warping or twisting about, as is generally the case with other bars; they are also much stronger and more durable, and in consequence of their combined strength, can be made considerable lighter.

CIRCULAR GRATES,

Of all sizes for Upright Boilers.



Also Manufacture all kinds of

Machinery Castings, Gas

Lamp Posts and Pipes.

All orders addressed to STERRY SMITH, Salem Mass., will be promptly attended to.

(See page 347.) **C. H. NEWCOMB, General Agent.**

ATHOL MACHINE CO.,

Incorporated May 18, 1868, for the Manufacture and sale of

STARRETTS'S PATENT MEAT AND VEGETABLE

CHOPPER

This is the most simple, durable and effective machine of the kind ever invented; is perfect in construction and in its operations; strong, and not liable to get out of repair, cuts Meats, Vegetables, Fish, &c., with astonishing rapidity and ease, and has already become an indispensible article in the Family, Boarding House, Hotel, Butchers' and Bakers' use, throughout the New England and Middle States. It occupies no more room than a common chopping tray, and is as easily cleaned.

These machines are warranted to work as recommended.

PRICES:

No. 1.	Small Family Size, chopping 3 lbs. Meat suitable for Pies, in 3 minutes,	$5.00
No. 2.	Large " " " 5 or 6 lbs. of Meat suitable for Pies, in 3 minutes,	8.00
No. 3.	Hotel, Boarding House, and Bakers' size, chopping 8 lbs. of Meat, in 4 minutes, suitable for Pies,	12.00
No. 4.	Hand or Power Machine, for Butchers' or Bakers' use, chopping 18 lbs. in 8 minutes,	50.00

☞ All orders promptly attended to and Machines shipped in good order. When required to be boxed, the cost of boxing will be charged extra; 25 cts. for No. 1, 35 for No. 2 and 50 for No. 3. All orders to be addressed to

ATHOL MACHINE COMPANY, Athol Depot, Mass.

RHODE ISLAND.

ALBION, 11½ miles from Providence, 31¾ from Worcester. A manufacturing village on the Providence and Worcester Railroad, in the town of Smithfield.

ANTHONY, 13½ miles from Providence and 76¼ from Hartford, on the Providence, Hartford and Fishkill Railroad. A small manufacturing village.

S. Colvin & Co. manufacturers of cotton, woolen and flax machinery. They commenced business in Dec., 1862. Occupy a building 80x30 feet, with ell 58x32 feet; employ about 60 hands, produce about 100 looms and 20 cards per month, and do a business of $120,000 per annum. Their motive power is furnished by a 15 horse power Burden wheel, under 20 feet fall. Manufactory located on a branch of the Pawtuxet river.

APPONAUG or Warwick, 51 miles from New London, 11 from Providence, on the Stonington and Providence Railroad. A village containing 2 or 3 churches. This place is situated in the town of Warwick, 180 miles from New York and 52 from Boston, on the Greenwich Bay, a branch of the Narragansett. One mile from the station is a large rock, which, when rocked, produces a noise that can be heard several miles, hence the name "Drum Rock." Many improvements have been made here for the past few years by the establishment of the Oriental Print Works, the information for which we could not obtain. The Indian name is Shawomet. Pawtuxet river washes the northern part of the town and meets the waters of the Narragansett at this place, separating Warwick from Cranston. This town is the birth place of two distinguished patriots and warriors, Col. Christopher Greene, and Major General Nathanael Greene, whose services and exploits are too well known to need comment from us.

ASHTON, 9½ miles from Providence 33¾ from Worcester. A manufacturing village on the Providence and Worcester Railroad, in the town of Smithfield. The Lonsdale Company manufacture cotton goods here.

BARRINGTON, 8¾ miles from Providence, on the Providence, Warren and Bristol Railroad. A country station and town by the same name.

BOSTON SWITCH. A station in the city of Providence, on the Providence, Warren and Bristol Railroad.

BRISTOL, 14½ miles from Providence, at the terminus of the Providence, Warren and Bristol Railroad. Delightfully situated on the waters of Narragansett Bay; its navagable advantages are unrivalled.—Population of the township, 5,500; of the village, about 4,000. Very fine and fast sailing yachts are made here.

The National Rubber Co. was established in 1842, by Geo. O. Bourn, in Providence. He carried on the business for several years at Dorrance, corner of Dyer streets. In 1861 the company was incorporated with a capital of $500,000, removing to Bristol in 1864. The officers of the company are, W. W. Brown, President; A. O. Bourn, Treasurer. The works are situated on Wood street, covering four acres of ground, occupy 20 acres of flooring, manufacture rubber goods of all descriptions. They employ from 600 to 700 persons, doing a business of from one and half to two millions dollars annually. Two Corliss engines of 350 horse power each, built by Wm. A. Harris, of Providence, and a smaller Corliss engine of 60 horse power, built by the Corliss Steam Engine Co. supplies the power; 12 cylinder boilers are used for supplying the engines with steam, for heating purposes and for vulcanizing the rubber. They use four large calenders, two small calenders, one embossing machine, 21 grinders, for masticating gum, three washing mills, and other large machines necessary for an economical and successful prosecution of the business. Office of the Company, 5 Exchange Place, Providence, R. I.

We clip from the Bristol *Phenix* the following notice of a visit to the Sugar Refinery in that town:

We were favored a few days ago with the privilege of seeing through that interesting manufactory, the Sugar Refinery in this town, it being the first time that we have had that pleasure since the valued, respected and successful gentlemen, Messrs. Brunsen and Sherry retired from the firm.

Our readers will remember that the establishment was purchased in February last by the senior partner of the late firm of Camp, Brunsen & Sherry—Mr. H. N. Camp—conjointly with Mr. Chapman and Mr. Robertson, all of New York. Mr. Robertson died soon after the formation of the new firm, and the works are now carried on by Messrs. Camp and Chapman alone, under the style of Hugh N. Camp & Co.

We notice many costly additions and improvements in various parts of the works; amongst the most prominent, a range of substantial brick buildings for retorts and charcoal

purposes; also, spacious dock sheds, under which fifteen hundred hogsheads of raw sugar can be stored, and a large handsome warehouse, fronting on Thames street, each floor of which will hold three thousand barrels of refined sugar.

The capacity of the house, is from 25 to 30,000,000 lbs. of sugar per annum. This production gives employment to about 200 hands, engaged in making or refining sugar, besides various coopers, stevedores, dock and coal hands, carpenters, and other mechanics.

We cannot describe in detail the various points of interest in the process of sugar making, which attracted our attention. The whole scene throughout—the loading and discharging sugars from numerous vessels—the docking, trucking, teaming, coaling and animated bustle on the wharf—then passing by the long range of seven, thirty-six feet Cornish boilers, into the engine house, through to the melting room; thence to inspect the vacuum pans, and so on through nine stories of tanks, moulds, filtering cylinders, crushing and powdering mills, centrifugal machines, drying rooms, &c. All these changes, together with the high temperature, left us (as they would any one unaccustomed to such busy scenes) with a strange bewildering effect, that outsiders can little understand.

These works have the most perfect dock and wharf accommodations, and enjoy all the facilities which our beautiful harbor so conveniently provides, for the shipping connected with their trade.

The building was originally erected nearly twenty years ago, by Messrs. C. R. Dimond & Co., who were succeeded in 1854 by Messrs. Camp, Brunsen & Sherry, of New York, under whose skillful management and increased business, large additions were made, so that the works and adjacent property are more than doubled since first started, and with the further extensions and complete modern appliances now added by the new firm, it ranks as one of the largest refineries in the country.

The Richmond Manufacturing Co. was incorporated in 1864. W. Richmond, President; F. E. Richmond, Treasurer; S. S. Stillwell, Secretary. This company run the Bristol Steam Mill, which was formerly conducted by the Bristol Steam Mill Co., which was incorporated in 1835. The present company occupy the mill, which is 107x45 feet, 5 stories, built of stone, with picker room attached 45x45, and an engine room in which is one of Corliss engines 100 horse power, with 8 cylinder boilers. This company employ 175 persons, making 48,000 yards per week, using up 900 bales of cotton per year; running 9,280 spindles and 202 looms. M. T. Bennett is Agent and Superintendent, and the office of the company is at No. 1 Waterman street, Providence.

Wm. B. Spooner & Son commenced the manufacture of sperm oils, oil soap and lubricating oils, in 1832. They now occupy 3 buildings covering about 16,000 square feet. They employ 2 persons, and have a capacity of making 2,000 gallons per month, as well as 100 lbs. of oil soap and 40 lbs. lubricating oil.

Reynolds Manufacturing Co. was incorporated in 1864. W. H. Reynolds, President; J. Hazard, Treasurer; Albert Knight, Agent. They occupy a 5 story stone building 178 x45, with wing attached 50x35, also 5 stories, for the manufacture of sheetings yard wide, of which they manufacture about 40,000 yards per week; employing 200 persons, and using about 20 bales per week. The power is furnished by one of Corliss engines 175 horse power, with four 30 inch, 30 feet cylinder boilers. The office of the company is at 37 Weybosset street, Providence, R. I.

Bristol Ferry, 55 miles from Boston, 12¾ from Newport, and 7 from Fall River. A station on the Old Colony and Newport Railroad, and in direct communication with Providence by steamer, daily, being located on Narragansett Bay. Quite a summer resort. A large hotel is in operation here summers for tourists and those who enjoy fine scenery.

Carolina Mills, 29¼ miles from New London, 33¾ from Providence. A station on the Stonington and Providence Railroad, 155 miles from New York and 77 from Boston.

No one, unacquainted with this locality would suppose for a moment, that any business of importance was done anywhere withing a dozen miles of it. Pine woods on either side, a solitary dwelling near, with "Oyster Saloon" over the door of the basement, is about all that can be seen.

A brief journey of three-fourths of a mile, through these woods, brings one to the village of Carolina Mills, situated on the Charles or Pawcatuck river.

The "oldest inhabitant" can remember when it was called "Nichols Mill," the only building was at the time being a small grist mill and a small one-story house, the latter still standing. The property passed from the Nichols family, into the hands of G. H. P. Wilcox, who commenced building the present dam, a few rods from the old one. Wilcox becoming involved in a too great outlay of money, the property passed into the hands of Rowland G. Hazard, of South Kingstown. A cotton mill was built of stone, of which material there was an abundance. Tenement houses were built for the help, and private dwellings from time to time were erected on the principal street. They were built by the mechanics and operatives in the mill, and some of them are models of neatness and good taste. The property, with nearly a thousand acres of land, mostly woodland, has been wholly or in part owned by the Hazards until the first of the present year, when it passed into the hands of Messrs. Tinkham & Metcalf, from Harrisville, R. I. About seven years ago, the cotton machinery was taken out and the mill changed to woolen. It now contains eight sets of cards with the necessary machinery for making first-class fancy cassimeres or beavers.

It has come to be a common remark that, from the influx of foreigners and other causes, the moral tone of small factory villages has been decidedly below par. There are many causes for this. In too many cases it results from the indifference of the owners and superintendents of the mills to the moral character of the employees. In regard to Carolina Mills, the Messrs. Hazard have ever evinced a liberal policy and done much to elevate the moral and religious tone of the village. They built a school house at their own expense, on their own land, and gave the free use of it to the district, which the people still enjoy, although the village has outgrown the house and it is altogether too small for their present needs. Still later, Messrs. T. R. Hyde & Co. rebuilt the church edifice, and graded the grounds about it, at an expense of about $2,000; so that now it is one of the neatest and most convenient churches in the vicinity. The citizens furnished it with carpets, cushions, and a good steel bell. In addition to that, Mr. Hazard has given $200 per year to sustain meetings, and proposes to continue his subscription another year. Too much praise cannot be accorded to Mr. H. for his efforts to better the condition of the village. Every project for the general good has received his hearty support.

Central Falls, 5 miles from Providence, 38½ from Boston, 38¾ from Worcester, on the Providence & Worcester and Providence & Boston Railroads. A manufacturing village in the town of

STAFFORD MANUFACURING CO.,
CENTRAL FALLS, R. I.,
Manufacturers of
A Superior Soft Enamelled
SPOOL COTTON.
Warranted 200 yards.
POST OFFICE ADDRESS, - - - - - PAWTUCKET, RHODE ISLAND.

Smithfield on the Blackstone river, and connected with Providence and Pawtucket, by steam cars hourly, and horse cars every 15 minutes. A post office was established here in 1868. It contains 2 churches. This village is identified with and really a part of the village of Pawtucket. Population, 1869, 5,000. See also Pawtucket.

Fales, Jenks & Sons, cotton and woolen machinery manufacturers. This business was established in 1830, by Fales & Jenks. The business is now conducted by Alvin Jenks, John A. Fales, F. Jenks and Stephen A. Jenks, who commenced as successors to Fales & Jenks in 1865. Their main building is 450x63 feet, part 2 stories and the other, 3 stories, foundry 150x63 feet, blacksmith shop 63x80 feet, cleaning room 63x 80 feet; lumber house 44x60, 2 stories; pattern house 101x44 feet, 3 stories; engine house 50x50 feet, in all, 7 buildings besides others attached. Their power is furnished by a Corliss engine, Fairbanks make, of 80 horse power with 6 cylinder boilers, Miller & Boardman's attachments. Employ 325 persons. This firm manufacture a great many force pumps, which they make a specialty. The business of Central Falls has been much increased since the building of these new works, which have given new life and enterprise to the village; many houses, some 20 in all, have been erected by them for the use of their workmen.

Stafford Manufacturing Co., incorporated in 1864. Capital $200,000; John A. Taft, Secretary; J. Wood, Treasurer; J. A. Adams, Agent, occupy 2 mills, as follows: No. 1, 200x40 feet, 5 stories, brick; No. 2. 100x40 feet, 3 stories, stone. Employ 300 persons; working up about 21 bales of cotton per week. Their power is furnished by water, 1 breast and 1 turbine water wheels. The capacity of the works is 4,000 dozen spools of thread per day of 200 yards each, or 9,600,000 yards. This business was established by Rufus J. Stafford, who commenced the manufacture of print cloths in connection with thread, about 1854; afterwards Stafford & Wood, who still continue the incorporation of the present company.

Thurber, Horton & Wood, successors to Stephen Benedict, occupy 2 buildings, 80x40, 4 stories and 86x37 2 stories, for the manufacture of print cloths and light sheetings, thread, &c. Run 5,000 spindles, and 100 looms, besides 1500 spindles for twisting. Employ 80 persons, making 4000 yards light sheetings and print cloths per day, besides skirt yarn, thread, &c. They also have a mill at Pawtucket.

Pawtucket Hair Cloth Co. commenced the manufacture of hair cloth in 1861, having at that time purchased the right to manufacture it by machinery from David, James M. and Richard Ryder and Freeman Baxter, who commenced experimenting on the same in 1855. The company built in 1861 a substantial brick mill 202x52, 4 stories with counting room, dye house and hair drawing room adjoining 60x 40. Use 387 Lindsley's patent looms. The goods are trimmed by 2 machines, the patent for which this company own both in the United States and in Europe. Employ 95 persons, making 1,250 yards per day. This is the only manufactory in the United States, where hair cloth is made by machinery. The capital of the company is $500,000. Lyman A. Cook, President, Olney Arnold, Treasurer, and D. G. Littlefield, Agent.

Weatherhead & Thompson, tanners, curriers and belt manufacturers; commenced business in 1858. They occupy three floors 106x40. They keep 20 persons employed in tanning and the manufacture of belts. The power is furnished by a 15 horse power engine, built by Booth Bros., of Pawtucket, with three cylinder boilers. They tan 1,200 domestic, 800 foreign hides, and 500 calf skins per month. This firm also started in July, 1868, a thread spool manufactory, employing 8 persons, turning out 200 gross per day; located in the same building.

E. L. Slocum, manufacturer of boots and shoes, successor to E. L. Slocum & Co., who succeeded Slocum & Pitcher, who commenced business in 1864; employ 25 persons, occupy two rooms 40x60 each, turning out from 25 to 30 doz. per week. His work is designed for the West, and is sold in New York and other cities.

M. B. Arnold & Co., manufacturers of every variety of French and American confectionery, occupy a 2½ story wooden building 65x30 feet, located at No. 7 Central st. They commenced business here in 1862, and have 12 employees; consuming about 10 barrels of sugar per week, and doing business amounting to $60,000 per annum.

Edwin Evans occupies two wooden buildings, one 22x32, the other 22x65, for the manufacture of glue. This manufactory is located about three-quarters of a mile beyond the station, near the Providence and Boston Railroad.

Collins Bros. occupy the lower floor of a new wooden building lately built for the manufacture of cotton and woolen machinery and twisters. The building is 40x50 feet, commencing business in 1865, and moved to their present location February, 1868. Employ 14 persons. Their machinery consists of 2 planers, 2 upright drills, 1 gear cutter, 13 turning and drilling lathes. Power furnished by one of J. A. Smith & Co.'s engines, built at Pawtucket, 10 horse power. They manufacture as a specialty 2 twisters per week.

The Old Pawtucket Thread Co. was organized about 1812, being composed of Oliver Starkweather, Uriah Benedict, Wm. Allen, Jabel Ingraham and Bosworth Walker, who are all dead and gone. Uriah Benedict was the first to

STAFFORD & HOLLAND,

CENTRAL FALLS, R. I.,

MANUFACTURERS OF

COTTON YARNS AND THREADS,

IN COP, SKEINS, OR ON BEAMS;

OR DOUBLE AND TWISTED FOR SEAMING, AND PRINTERS' TWINE.

P. O. Address, Pawtucket, R. I.

withdraw from the old company, followed by Oliver Starkweather and Jabel Ingraham, leaving Bosworth Walker and Wm. Allen to continue. Mr. Francis Walker, son of Bosworth, claims to have succeeded this company in 1830, having the plates and a part of the same machinery. He now manufactures spool and skein cotton thread, occupying one floor 40x72, with building adjoining for counting room, &c., turning out about 12,000 dozen spools per month, employing 52 persons.

STAFFORD & HOLLAND occupy 3 floors of "Jenks Mill" for the manufacture of cotton yarns and thread. The size of the mill is 40x100. This firm commenced business in October, 1867. Employ 23 persons and use up about 5 bales of coton per week, turning out about 2100 pounds of yarns of thread in the skein. The capacity of their mill is a little short of 3,000 spindles. The motive power is furnished by water. They do not spool their threads, but sell to other parties who do.

WM. NEWELL & SON, brass founders. This business was established in 1845 by Wm. Newell, who continued till May 1st, 1866, when his son was admitted. They employ 4 persons and occupy a building 50x30.

J. K. MALLERY occupies the lower floor of a building 150 x35, and part of third floor, for the manufacture of spools, and paper boxes. Employ 60 persons, turning out 1,200 gross of spools, and 2000 boxes per day. Power furnished by a Corliss engine, built by Fairbanks, 150 horse power.

MORAN & BROTHER occupy a 1½ story wooden building 32 x35 feet, built by them for the manufacture of confectionery. The business was established in 1864. Employ 10 persons, and do a business amounting to $20,000 per year. Most of their confectionery is sold by two carriages, which run at regular intervals through R. I., and a part of Mass.

ROBERT PLEWS manufacturer of patent adjustable card screens, cotton cans, patent tin cylinders for self-operating mules, twisters, and spinning frames. Commenced business in 1859. His factory is 75x35 feet, three stories high, located on Central street, directly opposite the railroad station. He employs at the present time, 8 workmen, consuming on an average about 600 boxes of tin annually. Doing business to the amount of $30,000.

American File Co., and U. S. Flax Co. See Pawtucket.

CHARLESTOWN, 22¼ miles from New London, 40¾ from Providence, 148 from New York, and 84 from Boston. A small village on the Stonington & Providence Railroad containing one church and one manufactory.

CRANSTON, 4 miles from Providence, 86 from Hartford on the Providence, Hartford & Fishkill Railroad. A manufacturing village in a town by the same name. The Pawtuxet and Powchasset rivers flow through this town and afford excellent water power. A part of this town, including the localities of Elmwood and South Providence was annexed to Providence in 1868. Here are situated the immense Print Works of the A. & W. Sprague Manufacturing Company, the account of which we could not obtain.

DROWNVILLE, 6½ miles from Providence, on the Providence, Warren and Bristol Railroad. A country station.

DAVISVILLE, 44 miles from New London, 18 from Providence, on the Stonington and Providence Railroad. A small country village.

DAVIS & SWEET occupy a 3 story wooden building 36x64 with dye house 18x28. They run 2 sets of woolen machinery, manufacturing Kentucky jeans, of which they make 5,200 yards, using 1,000 pounds clean wool per week. Their machinery comprises 34 looms, 824 spindles, 3 jacks, &c. Employ 28 persons. The power is furnished by a breast wheel,—7 feet fall.

GREENE, 24¼ miles from Providence, 65¾ from Hartford. A country station in the town of Coventry, on the Providence, Hartford & Fishkill Railroad. One of the labratories of B. P. Clapp & Co., chemists, is located 6 miles from this depot. (See Pawtucket, R. I.)

GREENWICH, 48 miles from New London, 14 from Providence, 174 from New York, and 58 from Boston. This village is situated in the town of East Greenwich, on Narragansett Bay, of which it commands an extensive view, and comprises an excellent harbor for ships of 500 tons burthen. The town is watered by two rivers; the soil is rough and stony. The village contains several churches, a bank, weekly newspaper, and a very flourishing boarding school. the Providence Conference Seminary, under the charge of the Methodists.

ORION COTTON MILL, Geo. J. Adams, Agent, B. B. Pierce, Superintendent. The works of this company are suited on the Main street in the western part of the village,

occupying one 3 story stone building 150x50 feet with addition 125x100 feet, 1 story and basement; boiler house attached. There is also a picker room 40x40 feet. The works are driven by a Corliss engine, 195 horse power, with 5 flue boilers. They give employment to about 190 persons making print cloths, $\frac{7}{4}$ and $\frac{8}{4}$ shirtings; the weekly production being 50,000 yards. The putting in of new looms, and more spindles in the fall of 1868, brought the capacity of the mill up to 54,000 yards. They run 300 looms, 11,792 spindles—besides the new ones added last fall. This company use 15 bales per week.

The Bay Mill Co. was incorporated in 1867, with a capital of $100,000. Wm. W. Hill, President; Albert Hill, Secretary. They occupy a 3½ story stone building 175x36, with two wings, besides store houses and wharves—the mill being located on the bay and directly side of the roailroad. This company employ 90 persons, running 100 looms and 5,600 spindles, making about 14,000 yards of fine shirtings per week, consuming 9 bales of cotton. The power is furnished by a 90 horse power Corliss patent, with 6 cylinder boilers. Pay roll, per month, $2,500.

Greenwich Woolen Mill, located at this place, run by James Waterhouse, manufactures fancy cassimeres and ladies' cloths. Employs 80 hands, run 6 sets cards, consume 4,500 lbs. wool per week, and produce 4,000 yards goods. A steam engine of 65 horse power furnishes the motive power, to drive the machinery.

HAMLET, 15¾ miles from Providence, 28½ from Worcester. A flag station on the Providence and Worcester Railroad. A small manufacturing village half a mile from Woonsocket. The only manufactory is Hamlet Mills, Isaac M. Bull proprietor. He commenced here in 1859, as successor to Carrington & Wardwell. The mill being built by Mr. Carrington's father many years ago. The main building was remodeled in 1862, and presents a very imposing appearance from the cars. It is 200x42, 4 stories and attic with wing 70x40, 2 stories. Two other mills 44x44, three stories and 100x50, 2 stories, with boiler house attached, comprise the principal buildings. He runs 15,000 spindles, 300 looms. Employs 200 persons, consuming 16,500 lbs. of cotton and producing 60,000 yards of fine sheetings per week. Two 9½ feet Fall River wheels furnish the power for the works, the fall here being 9½ feet.

HILL'S GROVE, 54 miles from New London, 8 from Providence, on the Stonington & Providence Railroad. A station recently established. A small village is rapidly being built surrounding the station.

Rhode Island Malleable Iron Co., incorporated in 1867, capital $100,000 with privilege to be increased to $200,000. T. J. Hill, President, S. W. Kilvert, Agent, Smith Quimby, Superintendent. This manufactory was built in the summer of 1867. Dimensions of buildiog including moulding room, 175x60 feet; annealing room 60x60 feet. The main part is 243 feet long with L 175 feet. Several houses have been built by this company for the accommodation of their workmen, numbering at present 30; when the works are in full operation, they employ 135. All kinds of malleable iron are made here.

INDIA POINT. A station in the city of Providence, on the Providence, Warren and Bristol Railroad.

KINGSTON, 35 miles from New London, 27 from Providence, on the Stonington & Providence Railroad. The village is about 2 miles distant, on quite an elevation. Contains 1 church, a court house and many fine residences. This is the home of John G. Perry, the inventor of one of the leading mowing machines in this country, which took a gold medal at the Paris Exposition. He has issued many valuable patents and has done much for the advancement of and the perfecting of labor-saving machines. The very popular summer resort, Narragansett Pier, is reached from this station, 7 miles distant. Twelve hotels are situated here, which are not sufficient to accommodate the many persons who resort to this place during the heated term. The villages of Rocky Brook, Peacedale and Wakefield are located in this town (South Kingstown), about 6 miles from the depot. Hon. Rowland G. Hazard resides at Peacedale, and is connected with

The Peacedale Manufacturing Co., manufacturers of woolen shawls, established in 1848. They employ 175 hands, and use 8 sets of machinery.

Stephen C. Fisk, at Peacedale, commenced business in 1847, in the same building he now occupies. A 2 story wooden mill, basement of stone 70x35 with building attached for engine and cloth room 24x44. An engine 15 horse power with 1 double flue boiler, Providence Steam Engine Co.'s make and an overshot wheel, furnish the motive power for this mill. He employs 18 persons, running 12 looms, turning out 3500 yards of satinets, &c., per week.

This mill is about 1½ miles from the above depot.

The manufactory of Samuel Rodman, Jr. is located at the village of Rocky Brook, about 4 miles south of the above depot. The mill was built of stone, 115x40, 2½ stories, with picker room, engine and dye house attached 40 x 40. The goods manufactured here are Rhode Island jeans, of which about 10,000 yards are turned out per week. Number of persons employed 115, running 1,200 spindles, 60 looms. An engine of 60 horse, Corliss pattern and make, with 2 flue boilers made by Gardiner & Tiffany, furnish the power for this mill. Mr. R. also runs a small mill in the same village making shoddy, of which about 1 ton is made per week, employing 4 persons.

Mr. Rodman is successor to S. Rodman & Sons, commencing in 1861. He is brother to the lamented Gen. Isaac Rodman who fought so gallantly at Antietam, where he fell. His monument is situated in the village near by his former residence, where his family now reside.

Rowland G. Rodman occupies a 2½ story stone mill, 90 x38, located at Rocky Brook, 4 miles from the above depot He runs 3 sets of cards, 1200 spindles, 30 looms, making about 3500 yards per week. Employ 25 persons, the engine furnishing the motive power for this mill, was made in New York, also, a water wheel (overshot,) 15 feet across the fall here being about 15 feet. Mr. R. commenced the manufacture of jeans in 1868.

Daniel Rodman conducts business in Kingston, R. I., for the manufacture of negro cloths, called D. Rodman's plains. He occupies a 2 story building 28x80 feet, employs from 18 to 20 hands, running two sets of machinery, and does a business of from $38,000 to $40.000 yearly. The saw mill is located on Saucatucket river, with a fall of 16 feet of water. An engine of 8 horse power also assists.

LONSDALE, 7 miles from Providence, 36¼ from Worcester. A manufacturing village on the Providence and Worcester Railroad. The Lonsdale Company run two mills here, manufacturing cotton cloth. We could not obtain any information. One and a half miles

southwest of this village is the Moshassuck bleachery, located in the town of Smithfield, R. I. The proprietors are W. F. & F. C. Syles, who reside at Pawtucket, two miles distant. It consists of two bleacheries, upper and lower. The upper bleachery is built of brick, and covers 30,621 square feet; it has also, 1,040 feet in length of dry house, covering 22,880 square feet. The capacity for doing work is 12 tons per day. The lower bleachery is 1,000 feet from the upper, and is also built of brick, covering about 16,000 square feet, with a dry shed 230 feet long, covering 6,000 square feet. The working capacity is 9 tons per day.

MANVILLE, 12½ miles from Providence, 30¼ from Worcester. A manufacturing village on the Providence & Worcester Railroad.

The Albion Company was incorporated about seven years since, but not organized until 1868. Harvey Chace, President, James B. Chace and J. Chace, Treasurers. The manufactory was originally a stone building and two wooden ones, to which have been added from time to time, brick buildings. Employ 300 persons; manufacture print cloths, shirtings & sheetings. Office 22 Canal street, Providence, R. I.

NATICK, 9 miles from Providence and 81 from Hartford. A manufacturing village on the Providence, Hartford and Fishkill Railroad. Here are located 4 large cotton mills, run by the A. & W. Sprague Manufacturing Co, the statistics of which we could not obtain.

NAYATT, 7½ miles from Providence, and on the Providence, Warren and Bristol Railroad. A country station.

NEWPORT, 30 miles south of Providence, 17 from Fall River, 75 from Boston, is located in latitude 41° 21 14″, five miles from the ocean, on the island of Rhode Island. The island is about 6 miles in length and 1 in breadth. The soil is fertile and under good cultivation; the surface is undulating, presenting a great variety of delightful scenery. If Newport were not, as it is, the most elegant and fashionable of all American watering places, its topographical beauties, its ancient commercial importance, and its many interesting historical associations, would yet claim for it distinguished mention. Coming in from the sea around Point Judith, a few miles bring the traveller into the waters of Narragansett Bay, where he passes between Fort Wolcott on Goat Island and the stronghold of Fort Adams, upon Brenton Point, on the right, and enters the harbor of a city that, in 1769, outrivalled New York in her foreign and domestic commerce. At this time, this town was in the zenith of her commercial prosperity. She had engaged in the foreign trade about 200 vessels; and nearly 400 coasting vessels, including a regular line of London packets, and employing no less than 2,200 seamen. New York, New Haven, New London, and other places, depended entirely on Newport as a market to supply themselves with foreign goods. Such was the amount of business done, that goods were not stored, owing to the want of room, while the wharves were literally covered with sugar, rum, molasses, and every kind of foreign and domestic goods. The coasters would take on board the merchandise and proceed direct to New York, Connecticut, &c., finding a ready demand. The West India trade was immense.

A druggist in Newport supplied Rhode Island, a part of Massachusetts, all Connecticut and North Carolina, and had an establishment in New York.

In the Revolution, the British long held possession of Newport, during which time and at their departure, it became almost desolate. Before leaving, they dsstroyed four hundred and eighty buildings—burned the light house, cut down all the trees, broke up the wharves, used the churches for riding schools and the state house for a hospital, and carried off the church bells and the town records to New York—disasters which reduced the population from 12,000 to less than half.

But the incidents of this period have left some pleasant memories for the present day; remembrances of the fame of Commodore Perry, who was born in Narragansett—across the bay—and whose remains now rest in Newport; of the residence of Rochambeau, and other brave officers of the French fleet; and of the visit of General Washington, and the *fetes* given in his honor.

Of late years the place has grown to be a great summer residence—a new city of charming villas and sumptuous mansions has sprung up, extending far along upon the terraces which overlook the sea. The chief picturesque attractions of the place are the fine ocean shores, known as the First, Second and Third Beach. The First Beach is chiefly used as a bathing ground by visitors. At the Second Beach are the famous rocks called Purgatory and the Hanging Rocks, within whose shadows, it is said, the celebrated Bishop Berkeley wrote his "Minute Philosopher." Nearer to the city, and upon the coast, is the great spouting cave. The Glen and other localities, are charming places to ride to.

Among the venerable buildings still to be seen are the ancient State House, (Newport being a semi-capital of Rhode Island,) the Redwood Library, erected in 1748, (among its collections are 84 large volumes presented by the King of England), Tammany Hall Institute, Trinity Church, the Vernon Family Mansion, Commodore Perry's House, the City Hall, the fortifications in the Harbor, and the "Old Stone Mill," a relic of a period past remembrance, and which has caused much speculation. It is claimed by the author of a work published in Denmark, to have been erected by Northmen, who, it is supposed, discovered this continent anterior to Columbus, in the twelfth century. These Northmen were descendants of the Scandinavians, who, it is thought, sprang from the Thracians, mentioned by Homer, a nation now extinct. The Danes, Swedes, Norwegians and Icelanders, all come under the name of Northmen, or Norsemen; on the other hand, it is said, the mill was erected about 200 years ago, and belonged to Gov. Benedict Arnold. In his will he calls it "my stone-built wind mill," and in his son-in-law's will, (Edward Pelham,) dated May, 1741, mention is also made of it, as though it had been built in Gov. Arnold's time. The dimensions of this curious structure are nearly 25 feet in height, its diameter on the outside is 23 ft., and inside 18 feet 9 inches. It is circular and supported upon eight arches, resting upon thick columns about ten feet high. The height of the centre of the arches from the ground is 12 feet 6 inches, and the foundation extends to the depth of 5 feet. It is built of small pieces of stone firmly put together with a very hard cement or mortar.

Newport was the birthplace of the gifted miniature painter, Malboue; and Gilbert Stuart's place of nativity may be seen in Narragansett, across the bay. Stuart made two copies of his Great Washington Picture for Rhode Island—one can be seen in the State House at Newport, the other in that at Providence.

Franklin's Printing Press, which his brother James imported in 1720, is in the office of the Newport *Mercury*, a paper established in 1758, by James Franklin, and which is

still published by Messrs. Pratt & Messer. The press is kept and honored as the one on which the great Benjamin worked when learning his trade.

The old chair of State, in which Gov. Benedict Arnold sat at the reception of the charter in 1663, when it was proclaimed in the presence of all the freemen of the colony, at Newport, is in the possession of Gould family.

Newport is the terminus of the Old Colony and Newport Railroad, and is in daily communication with New York by a magnificent line of steamers; also, with Providence by both rail and steamers. The harbor is safe and commodious, having sufficient depth for any vessels that may enter. Newport has a transient population during the summer months of 5,000, who occupy the many elegantly and costly built residences, villas, &c., found here. The regular inhabitants are estimated to be upwards of 17,000. There are 21 churches, 2 newspapers, 8 national and 2 savings banks with a capital of about $3,000,000.

Take it all in all, Newport is one of the most interesting and "*enjoyably beautiful*" places that the tourist can visit—fine hotels—beautiful drives—excellent bathing; and *anything* in the shopping line that can be found in New York, Boston or Providence.

MANUFACTURERS.

Gideon Lawton & Co., sash, blind and door manufacturers; also, planing, grooving, turning, and all styles of moulding. Lawton & Co. commenced the present business during the year 1851, and at the present time are occupying one wooden building of two stories, 40x60 feet, and an ell 30x 70 feet, also of wood. There are employed at present 15 hands. A 15 horse power "Greene engine," having 2 flue boilers, furnishes the motive power.

J. L. & G. A. Hazard are manufacturers of first class cabinet furniture, of all descriptions—the greater part of their work being done to order. The present company are the successors of S. Hazard, a brother, who commenced business some 30 years ago, and has been carried on by J. L. & G. A. Hazard, about 14 years. The buildings now used, are as follows:—the main building is 70x30 feet, built of wood, and having an addition 50 x 20 feet, two stories; and another building 45x25 feet, also two stories. The wareroom 45x24 feet, also of wood, is one story in height. There is one large lumber shed and one drying room, some 20x16 ft. One of Chubbuck & Campbell's 12½ horse power horse engine, having one return tubular boiler, furnishes the necessary power. The average number of employees, is 22.

The Newport Shot and Lead Co., manufacture all kinds of lead pipe, sheet lead, bar lead, buck and drop shot, minnie and rifle balls, &c. These works were originally started by Mason & Bradford, and some time afterwards was changed into a stock company. An 80 horse power engine of The Providence Steam Engine Co.'s build, furnishes the motive power. There are two cylinder boilers. The principal building is of wood, being about 109x45 feet, 3 stories. The office is 12x25 feet; shot-tower is 150 feet high, and is 15 feet in diameter at base, and built of brick. There are two sets of "chilled rolls," being used for sheet lead, and the other for rolling zinc. Full number of men for running works, — 12.

Richmond Manufacturing Co. Situated on Thames St. Manufacture print cloths. The size of the old stone mill, which was built about 1831, is 116x46 feet, 3 stories in height. On the front of the stone mill there is an addition 65x46 feet of 4 stories, built of brick. The engine and boiler house, is built on the rear end of the mill, being about 54x46 feet. The picker house addition is 40x45 feet, two stories in height, and built of stone. One store house 20x 40 feet, of wood, two stories, one store house 20x20 feet also, of wood. The blacksmith's shop is built of brick, 15 x 13 feet, and an addition to main building 22 x 36 feet. The office is a nice brick building 56x17 feet, one story; the building fronting on Thames street. They have also a number of dwelling houses on the opposite side of the street. Every convenience has been furnished for extinguishing fires, which with the excellence of everything connected with the mill, makes it strictly a first class establishment. The present company was incorporated in 1865. The number of employees is 150. There are 210 looms, 9,632 spindles, 9,000 pounds of cotton being used, turning out about 48,000 yards of cloth per week, and sometimes a still greater quantity. The engine used, is one of The Providence Steam Engine Company's, of 80 horse power, and having 10 plain cylinder boilers.

W. Hill & Son, Brewers. This business was established by Mr. Evans, an Englishman, some forty years ago, was afterwards owned by Wood & Hayward for a few years, and finally, about 30 years ago, passed into the hands of Mr. Wm. Hill, who with his son now carry on the business. The building used is of wood, two stories in height, and measuring 95x65 feet. About 6 men are now employed. One of Fuller's 7 horse engines, with tubular boiler furnishes the required power.

Swinburne's Steam Flour Mill was established in 1864, by Wm. J. Swinburne, for the manufacture of flour and meal. The main building is 50x50 feet and 4 stories high with an ell 35x35 feet, 3 stories high, with an addition 20x 25 feet, 1 story high. There are employed, when the mill is in full operation, about 16 men, using 5 run of stones, producing about 900 bushels of wheat and 500 bbls. of flour monthly. A Corliss steam engine of 75 horse power, made by Corliss Steam Engine Co. of Providence, and 4 cylinders 30 feet long, 2½ feet in diameter, furnish the motive power. Connected with the above establishment is a store house 135 feet long, 1 story high; cooperage 60x35 feet wide and 2½ stories high, capable of turning out 200 bbls. per day; storage shed for cooperage, stockcoal, &c., stables and office, the whole occupying about 45,000 square feet of land. Vessels come to within 4 feet of the mill and are discharged by ship elevator. Each cargo is weighed on Fairbanks' patent hopper scales and is screened and put in bin by machinery.

Pipmuc, 17¼ miles from Providence, 72¾ from Hartford. A country station in the town of Coventry, on the Providence, Hartford & Fishkill Railroad.

Pawtucket, 4½ miles from Providence, 39 from Boston, 38¾ from Worcester. The village of Pawtucket is situated on both sides of the Blackstone or Pawtucket river, in the towns of North Providence and Pawtucket, R. I., on the Providence & Worcester and Boston & Providence Railroads. This village, large enough to be, and having more enterprise according to its size than half of the cities in the United States, has long been a manufacturing place of much importance. The commerce of Pawtucket is quite considerable, large schooners and barks coming direct to the wharf. The water power is immense, and the fall of the river within a short distance is 50 feet. Gas was introduced 1853. There are 11 churches, 3 national and 3 savings banks, and a population of 12,000. This place is connected with Providence by steam cars hourly, and by horse cars every 15 minutes.

It is hardly necessary to repeat that which is so generally known, that in this place cotton cloth was first successfully

REYNOLDS & GREEN,

Dyers, Bleachers and Printers of Woolen and Worsted Yarns, Braids,

ALSO LADIES' DRESSES, CLOAKS, SHAWLS, &C.,

Gentlemen's Coats, Vests, Pantaloons, and Overcoats, Deyd, Cleansed, and Pressed,

IN A SATISFACTORY MANNER AT SHORT NOTICE.

PLEASANT VIEW, PAWTUCKET, R. I.

RICHARD W. REYNOLDS. HENRY H. GREEN.

made in the United States by water power machinery, under the inventive genius of Samuel Slater, Esq., the father of cotton manufacturing in this country.

MANUFACTURERS.

One of the oldest established thread establishments in the United States, is the one carried on by Dexter & Bro. This business, which has for the past 10 years grown to immense proportions, was established by Nathaniel G. B. Dexter, the father of the present firm, in 1820. When he commenced, the value of the entire productions did not equal $20,000 per year. Now, the value of the productions amount to over half a million. This firm are manufacturers of knitting, darning and tidy cottons, in balls and skeins. Also, single, double and 3-ply yarns, on beams, in the skein, or cop. Have three mills; two situated in Pawtucket, one in Valley Falls. Use steam power in two of them; water in one. Run 12,000 spindles—5,000 mule, 7,000 ring. Consume 2,000 bales of cotton per year, produciug about 850,000 pounds of yarn. Give employment to about 225 hands.

Reynolds & Green, dyers and bleachers of woolen and worsted yarns, braids, &c., occupy a 2 story wooden building 75 x 45 feet, situated on River street, Pleasant View, where they employ 25 hands, and have a capacity for dyeing and bleaching 3,500 lbs. per day. Their motive power is furnished by an engine of 12 horse power. This firm commenced business in July, 1867, and are also dyers and cleansers of ladies' and gentlemen's garments, carpets, &c., &c. Worsted braids a specialty.

Among the establishments which have made Pawtucket known to the world at large, is the print works of the Dunnell Manufacturing Company, which are more extensive than is even generally kuown to the residence of the town. The buildings, 36 in number, together with the necessary yard room, cover nearly 30 acres of ground. It was incorporated in 1848, with a capital of $775,000, and is said to be one of the first establishments of the kiud in the United States, and in the arrangement as respects economy of labor and the best known modes of calico printing, are not surpassed in this country or in Europe. The print shop contains 9 machines. In steam prints as many as 10 colors or tints have been produced in one pattern, though the average is about four. The steams are clear and bright in color, the madders, especially the lawn fabrics, clean and well finished, the prints being generally pure and of excellent tint. Probably a greater variety of printed fabrics have been produced at this establ shment than in any other in the United States. Almost every kind of goods printed in France are also printed here, such as organdies, lawns, jaconets, brilliants, pongee silks, and figures, as well as all the different varieties of calicoes, from 40 down to 24 inch. Nearly one-half of the establishment is devoted to printing fine goods. All the designing and engraving is done at the works. This company consume weekly 450,000 yards of printing cloth and 100 tons of coal, producing 22,500,000 yards of calico per annum. The motive power is furnished by four steam engines, making 200 horse power. The works employ about 250 persons. Their selling agents are Messrs. Anthony & Hall, of New York, and Cooper, Vail & Co., of Boston, Mass. J. L. Dunnell is President and C. B. Farnsworth, Treasurer of the company.

Among the new branches of business introduced here is that of worsted braids. D. Goff & Son were among the first in this vicinity to go into this business. Their mill is 50x70 feet, 6 stories high, built of stone; machinery all new and of the most approved kind, with a full set of English combing, drawing and spinning machines, and 220 braiders of American make. They use Canada wool and employ about 75 persons. The capacity of the mill is 17,968,000 yards per year.

William Jeffers, manufacturer of steam fire engines, occupies over 6,000 square feet of room and has 23 employees. His machinery consists of 9 engine lathes, 2 horizontal drilling lathes, 3 upright drills and 3 planers. Mr. Jeffers commenced building hand engines in 1848, and in 1861 turned his attenton to the building of steam fire engines. He has built nearly two hundred engines for different parts of the Union.

S. Fifield, stove, sink and hollow ware manufacturer, occupies three buildings, one of them 100x70 feet, one 70x30, and the other, 30x50 feet. He has from forty to fifty employees, and manufactures the Magnet Cook, Eagle Cook, Standard Cook, Brilliant Cook, Home Guard Range, Factory Stove, Cylinder Stoves, Eagle Air Tight, also twelve patterns of sink and hollow ware. All of his stoves, sinks, &c., are of his own invention. He has also completed a new stove called the Magnet Cook, which was put into the market 1868. The amount of castings used by him is from 500 to 600 tons per year.

The Pawtucket Flour Mill, under the management of N. M. Burr, Esq., which was burned in December, 1867, and rebuilt in 1868, is now in successful operation. The main building is of brick 40x60 feet, and is 5 stories high; to the westerly end of this brick building, there has been added a wooden structure, of the same width and height as the main building, which is divided into six compartments, to be used as grain bins. The sides and partitions of these grain bins are constructed entirely of layers of joist, each one of which is firmly spiked to the preceding layer, and the whole braced and strengthened with iron rods, in

DEXTER & BROTHER,

MANUFACTURERS OF

KNITTING, DARNING AND TIDY

COTTONS

In Balls and Skeins.

Also, Manufacturers of all kinds of

SKIRT YARNS,

AND

Two Threaded Yarns,

FOR TAPES AND BRAIDS,

Seaming & Printers' Twine and Cop Yarns,

FOR HOSIERY PURPOSES. PARTICULAR ATTENTION PAID TO FURNISHING

Yarns for Fancy Woolen Goods.

39 PLEASANT ST., Pawtucket, R. I.

All Orders Promptly Attended to.

SIMEON W. DEXTER. DANIEL S. DEXTER.

N. P. HICKS,

AT THE OLD SLATER MILL, Mill Street, PAWTUCKET, R. I.

Continues to Manufacture

HICKS' U. S. STANDARD RING TRAVELERS,

HICKS' IMPROVED POINTED BELT HOOKS.

Spinning Rings, Harness Hooks, Strap Hooks, Jack Hooks, Harness Eyes, Guide Wires, Cotton Ropes, Cotton Yarns, Cotton Banding, Cotton Lines, Cotton Twines, &c., &c., &c.

o

I manufacture every description of the above mentioned goods, and from the best materials. Their long established use and reputation, and their superiority to all others made, render them a necessity to Manufacturers. I spare no pains to make these articles entirely satisfactory to customers.

o

For Sale by Dealers in Hardware and Manufacturers' Supplies.

o

Orders sent to C. WHITE, Sole Agent, No. 47 Exchange Place, Providence, R. I., or to the Subscriber, will receive careful and prompt attention.

N. P. HICKS, PAWTUCKET, R. I.

the most substantial manner. It is estimated that these grain bins will, together, hold about 30,000 bushels of grain, the enormous weight of which makes it necessary that they should be constructed in the strongest manner possible. The roof of the building is fire proof, the windows are to be furnished with iron shutters, and the wooden part is covered with corrugated sheet iron; thus any ordinary exposure to fire, externally, can have but little effect to endanger the mill. There are in the mill seven run of stone, which are connected with the grain bins, the bolting machines, the smut machines, &c., by elevators and conductors of the most ingenious description. The arrangement of the machinery in the third and fourth stories has a complicated appearance to the uninitiated; but it is such that, although the grain must pass through almost numberless elevators, conductors, machines and processes, before it is ready for the market, yet, not a particle of it is lost; and even the sweepings of the floors are preserved, and manufactured into an inferior kind of feed. The machinery is driven by two water wheels, a larger and a smaller one, the aggregate force of which amounts to 110 horse power. They employ 10 persons, and produce 100 barrels of flour and 800 bushels of grain and meal per day. It is the second flour mill in size in New England, yet, in every other respect it may be justly classed among the first.

It is an undisputed fact in the history of all prominent inventions, or the proposal of carrying out practically any great public work or enterprise, that the first experiments, commenced under many discouragements and difficulties and were derided by the world at large. History is replete with these facts. The invention of the first steam engine, the first sewing machine, the first telegraphic instrument, the *first* Pacific Railroad,—all prove this conclusively. To follow this idea still further, the production and invention of ring travelers (a great acquisition to the manufacture of cotton and woolen yarn, jute, thread, &c.,) was pursued under many difficulties by N. P. Hicks, Esq., of this place, who claims to be the inventor of the art of forming the circle of the ring traveler to suit the different kinds of rings; also of numbering them correctly, and establishing *uniformity in their size, shape, temper and finish*, while in the employ of H. & S. B. Chase, in Valley Falls, R. I., many years since. His experience in the spinning room suggested the want of such an article, and, in connection with his other duties, he rudely constructed his first ring travelers, hardening the rings at his home over a cooking stove. He continued in this way for a number of years, till quite a trade had been acquired, when he embarked in the manufacture of them quite extensively. His establishment comprises the "Old Slater Mill," where Samuel Slater perfected his inventions that have since been so valuable. It is situated in the rear of 39 Mill street. It is 140 x 38 feet, 3 stories, of which he occupies two; also 2 rooms in a brick building near, 20x20 feet. The first floor of the Slater mill has 2 rooms, each 70 x 28 feet, where are manufactured mule banding, cable cord, bleachers' twines, wrapping twine, &c., using for their manufacture 9 twisters, 3 rope machines, 2 spoolers, 1 winder, 2 reels, 4 machines for making loop bands, 9 braiders, 7 traveler machines, 2 belt hook machines, 3 sets of rolls for plating wire, 5 screw machines for making all descriptions of wire goods for cotton and woolen manufacturers, 3 presses for forming same, and 3 machines for jointing wire, &c., &c.

The 2d floor 140x28 feet, contains machinery for the manufacture of spinning rings, straightening wire and for general repairs, having a capacity for producing 1,000 rings each week, with the intention of increasing it to 3 times that number.

The brick building adjoining is 20x20 feet, containing 3

JAMES O. DRAPER,

Manufacturer of

SOAPS!

For Woolen, Cotton and Print Works; also Family Soaps of all kinds, and Superior Glycerine Soap.

Orders by Mail or Express will receive prompt attention.

PAWTUCKET, R. I.

furnaces for annealling purposes and 4 burnishers for polishing goods with a capacity of furnishing 500,000 per day, and 1 furnace for hardening spinning rings. In connection with this, Mr. Hicks has a rope walk 575 feet long 16 feet wide, located at the lower end of the Pawtucket Riding Park, where he manufactures cotton rope from 3-16th to 1½ inch in diameter.

The power is supplied at the Slater and brick mills, by a Kilburn & Lincoln iron wheel 17 horse power, the fall is 8 feet on the Blackstone or Pawtucket river.

Mr. Hicks claims that by an experience in the Spinning Room of twenty-eight years, and fifteen years constant occupation in making and testing Ring Travelers, he has acquired a full knowledge of the wants of Spinners, and the best styles for Ring Travelers, and is prepared by means of ample mill room and water power, with superior machinery and workmanship to make a better article than any other in the market; and that he has always made it a practice to test his Travelers, and to make them of the best possible form and size to suit the peculiar form of Rings and work to be performed by them. His customers can always rely upon the number, which will be found upon each and every box, as being correct, the Travelers uniform, and claims them subject to at least ten per cent. less waste than any other Traveler ever offered to American manufacturers.

To sum up the different styles and kinds of goods made we will enumerate again, Hicks' U. S. Standard Ring Travelers, used for spinning and twisting cotton yarn, thread, twine, and woolen worsted goods, of every description; also belt hooks, spinning rings, harness straps, and jack hooks, cotton line, twine, banding, &c., &c., and 37,000,000 different styles and shapes of wire goods.

James O. Draper occupies a two story wooden building, 60x30 feet, situated on River street, Pleasant View, and manufactures fulling, scouring and family soap. Also a superior soap used by calico printers. He commenced business here in 1859, and now employs 5 persons, who turn out weekly about 5,000 lbs. of soap, consuming about 3,000 lbs. of tallow, grease, &c., &c. The soap manufactured by him for the use of calico printers, is not excelled, rarely equalled by any other kind in the country, and is being extensively used by them in all cases, giving entire satisfaction. Mr. D. is also manufacturing a superior glycerine soap made into balls, convenient for family use, for the toilet and for shaving purposes.

Cushman, Phillips & Co., manuf. of spools for cotton, linen, and silk thread, occupy a 3 story stone building 40x60 feet, with boiler house attached, 20x40 feet, located at Pleasant View. The business was established by Robert Cushman, at Cumberland, R. I. in 1848, and in 1850 he removed to this place. In 1857 he formed a co-partnership with his brother under the firm name of R. & G. Cushman, and the business was carried on by them at this location, until April 1st, 1868, when the firm was changed to its present name. They have on an average 48 employees, run 14 sets of spool machines, consume about 700,000 feet of white birch lumber annually, and have a capacity for producing 20,000 gross of spools per month, doing a business of from $70,000 to $75,000 per annum. An engine of 40 horse power, built by Booth Brothers—formerly of Pawtucket—furnished with steam from 2 cylinder boilers, 40 horse power combined, built by Allen & Endicott of Cambridgeport, Mass., drive their machinery. This firm have a branch establishment, located at Farmington Falls, Maine, carried on by R. Cushman & Co.

Richard B. Gage occupies a brick mill, situated on Fountain street, Pleasant View, for the manufacture of cotton yarn. It was completed in 1868, and is one of the finest structures of the kind, in the State. The main building is 138 feet 8 inches long, 52 feet 8 inches wide, and contains three stories and an attic; it is constructed wholly of brick, and built in a very thorough manner. Adjoining the main building, is another, fifty feet long by 40 feet wide, two stories high and attic. This building contains an engine room, a

CUSHMAN, PHILLIPS & CO,

Successors to R. & G. Cushman, Manufacturers of

Spools for Cotton & Linen Thread,

Machine Twist, Tram and Sewing Silk; also Braider Bobbins, Wooden Balls, &c, &c.

Pleasant View, Pawtucket, R. I.

ROBERT CUSHMAN, J. HENRY PHILLIPS, ABNER ATWOOD.

JAMES S. BROWN,

MANUFACTURER OF

COTTON AND WOOLEN

MACHINERY,

AND

Malleable Iron Castings.

SHARP & ROBERTS' SELF-ACTING MULE,

FOR COTTON.

Parr, Curtis & Madeley's Self-acting Mule for Cotton and Wool.

PATENTEE AND SOLE BUILDER OF THE

PATENT AMERICAN SPEEDERS.

PAWTUCKET, R. I.

boiler room, and a lapper room, and like the main building is built of brick. The timbers for the floors and support of the machinery, in both buildings, are of huge dimensions, and are all of hard pine, and these in their turu are braced and strengthened by iron posts and rods, in the most substantial manner possible. The mill cost over $100,000. It contains 4,384 spindles. The number of hands employed is 35, who produce weekly from 3,000 to 5,000 lbs. of yarn. An engine of 80 horse power supplied with steam from 4 cylinder boilers, 24 feet long by 2½ feet wide, built by the Washington Iron Works, of Newburg, N. Y., drives the machinery. Mr. Gage was formerly proprietor of what is now known as the Lebanon mill, but sold his interest in that enterprise about two years since.

James S. Brown, machinist and machinery manufacturer, a son of Sylvanus Brown, who was employed in 1790 to assist Samuel Slater in perfecting his inventions and to enable him successfully to carry out his plans which have proved since so valuable. The son is even more distinguished than his father as a machinist and inventor. The slide rest used in turning lathes, by which the height of the tool can be adjusted while the lathe is in motion, was invented by him while in the employ of Pitcher & Gay in 1820, which firm he succeeded. He also invented a gear gutter for bevel gears. It requires no change of the head stock to make the proper taper in going once round the wheel. He has been extensively engaged in the manufacture of Sharp & Robert's patent self-acting mule. Among other improvements made by him on this mule was putting a catch box in the middle of the carriage under the head, which improvement is believed by many, to be the life of the mule in this country.

Mr. Brown erected his present manufactory in 1849. It is 400 feet in length, 60 in breadth, and 2½ stories high, with a large wing attached in which is stationed the engine that supplies the power for the whole shop. In addition is a pattern house 46x72 feet, and 2½ stories high above basement, built in 1859. Most of the tools used in his establishment were made and invented by him. The principal business of this establishment at the present time is the building of the proprietor's patent speeder, and Parr, Curtis & Madeley's patent mule, the latter designed for both wool and cotton. A new building was erected in 1867, 96x38 feet with an ell 24 feet square, for making malleable iron castings. The general management of this extensive establishment is under the charge of the son of the proprietor, whose energy and skill qualifies him for the responsible situation which he holds.

Albert P. Everett occupies a 2 story wooden building 50x25 feet, located in the rear of 39 Mill street, for manufacturiug bleaching and pressing ladies hats of every description. He commenced business Sept. 1st, 1868, and during the busy season employs upward of 30 hands. He has in use 3 treadle presses for stamping purposes and facilities for doing work in the best style of the art.

T. M. Greene & Co., manufacturers of every description of brushes, occupy two floors in a 3 story wooden building 60x33 feet, located at No. 45 Mill street. This firm commenced business in 1866, as successors to George F. Greene, who established the business in Attleboro', about 10 years since. They employ on an average 8 persons; consume annually about 3,000 lbs. of bristles, and do business amounting to $12,000. T. M. Greene and John McArthur, Jr., constitute the company.

W. A. Beatey & Co., jewelers findings and jobbing materials. Commenced business in 1865. Employ 15 persons; occupy 3d floor in Greene's Mills.

RICHARD HARRISON & COMPANY,

Pleasant View, Pawtucket, R. I.

Formerly New England Printing Co.

Dyers, Bleachers and Printers of Woolen, Worsted and Cotton

YARNS AND BRAIDS,

OF EVERY DESCRIPTION.

LOCK BOX 68. PLEASANT VIEW, PAWTUCKET, R. I.

R. Bliss & Co., croquet, wooden games, hand and bench screw, and tool handle manufacturers. This firm has been established since 1833, the style remaining the same since the commencement, notwithstanding the retirement of Mr. Bliss and others that originally composed it. They occupy a new 2 story brick building 120x40; employing 33 persons. Their engine, made by J. A. Smith & Co., of this place, is 40 horse power. They use up about 400,000 feet of lumber per year for the manufacture of their various articles, using 15 lathes, 2 planers, 2 boring machines, 1 motising machine with borer, 7 saws, &c.

Richard Harrison & Co. are bleachers and printers of cotton, woolen and zephyr yarns, &c. They occupy a three story wooden building 120x20 feet, with ell attached 36x40 feet, 4 stories, located on River street, Pleasant View, having been engaged in the business at this location since Jan. 1867. They run 5 printing machines with a capacity for printing 600 lbs. per day, of every style and color, in a manner which we feel safe in saying is not surpassed by any party in the United States. They own a patent, invented by John Foster, applied to their printing machines, which enables them to do double the amount of work, and in a far superior manner to the old method. In connection with this, they have recently bought the large and extensive dye works formerly owned by Messrs. Hayley & Harrison, and Mr. Thomas Hayley, which consist of a dye house 70x40 feet; scouring room 40x40 feet; boiler room 40x20 feet; receiving room 60x40 feet; packing room 60x20 feet, and dry room 70x40 feet; the whole covering an area of 50,000 sq. feet. In these works woolen, worsted and cotton yarns and braids are dyed and bleached—the capacity being 4,000 lbs. per day. They employ 25 hands. Their machinery is driven by an engine of 12 horse power, built by Booth Bros., formerly of this place. They also have in use three tubular boilers, each 16 feet long, used for heating and boiling purposes, built by Messrs. Dobbins & Crawford, of Lowell, Mass., the combined power of which is 150 horse.

The Union Wadding Co., located near the Railroad, is one of the largest manufactories of the kind in the world. The company consists of Messrs. Darius Goff, John D. Cranston, Stephen Brownell and H. A. Stearns, the latter being Sup't of the works. Their main building is of stone, 350x40 feet, 2½ stories, with picker room adjoining 60 x 40, 2 stories. The boiler room, which is 60 ft. square, has an engine of 80 horse power, Corliss pattern, and 5 cylinder boilers. Another building for cleaning stock, 60x24 feet, 2 stories; also, a carpenters' and machine shop, with several new store houses. The production of wadding is about 5,000 pounds per day, with facilities for preparing 6,000 lbs. of cotton waste for wiping steam engines and other machinery. The manufacture of wadding in 1 day was 24,580 yds. almost 14 miles in length.

They make 10 or 12 different styles of wadding and 5 or 6 varieties of machinery waste. They have also a large bleachery near Providence, connected with the above, and a sorting house, where 80 persons are kept busy assorting their work.

James A. Smith & Co. succeeded Booth Bros. in 1866, in the manufacture of steam engines, works for bleachers and tanners and machinery generally. Employ 10 persons; using 7 lathes, 1 planer, 1 upright drill; business per year $20,000. Motive power furnished by an engine of their own make 8 horse power with tubular boilers 36 inches, 11 feet long 10 feet tubes, made by Thomas Cunningham of Charlestown, Mass. The building is a new one built of brick 60x30, 3 stories, of which they occupy 2 floors.

C. E. PITCHER & CO.

—MANUFACTURERS OF—

SPOOL COTTON,

Of Every Number, Ply and Color.

PAWTUCKET, R. I.

C. E. PITCHER & Co. commenced the manufacture of spool cotton in the building on River street, known as the stone mill. in 1867, employing 20 hands. In August, 1868, they removed to mill on Jenckes street, near corner of Pleasant, which they occupy for winding and store rooms. Dressing room on Pleasant street, rear of Dexter & Bro. They now employ, all told, 35 hands, with the capacity for turning out 375,000 dozen, 200 yds. thread per year, of every number, ply and color.

HOPE THREAD Co. This company, late of Boston, Adams and Randall, and Joseph Carter & Son, consolidated their business in September, 1868, for the manufacture of knitting cotton, under the above style; their office is located at 14 Main street, running three mills, in which they employ over 100 hands, and produce 10,000 dozen glazed spool cotton, per week. The product includes several brands of thread, most prominent among which is the "Hope." They also make large quantities of knitting cottons, skein yarns, shoemakers' threads, &c. Their selling agents are Warren Brown & Co., of 104 Reed street, N. Y., and Aug. F. Mason, 81 Milk street, Boston.

L. UPHAM & Co., commenced business in 1855. Manufacture thread dressers, wheat hulling machine, calender stretchers and patterns. They occupy 1st floor in Greene's Mills, 70x30. Also two story building adjoining 80x40. Employ 18 persons,

J. M. HOPKINS & Co. successors to J. M. Polsey in 1866, occupy a btilding 100x40, for the manufacture of wooden boxes, in the rear of 4 Main street, near the bridge. This concern uses water power, being close to the falls and overlooking the river. Employ 15 persons, manufacturing 3,500 boxes per week, of different sizes, using for their construction 1,000,000 feet of lumber per year. The boards are sawed out the required length at this building and taken to another in the place to be put together in a building 40x60, 2 stories with ell 40x40, 2 stories. Yeast powder, cream tarter and thread boxes are those usually made here.

THE oldest if not the largest spool and bobbin manufactory in the United States, is that of WILLIAM A. METCALF, successor to N. P. Towne & Son who had been here for some 20 years, who in turn succeeded some other person, and so on back to the time of Samuel Slater, who occupied this very building, for the perfection of those ideas, that made his name so well known and respected. The structure is of wood, some 3 stories high overlooking the river and directly opposite, where Sam Patch, took his famous leap. Some of the machinery run in 1790 is in use now, to which is added all the new improvements, that inventive genius could suggest. This manufactory is well known throughout New England, and supplies many of the manufactories with their spools and bobbins. The area occupied by Mr. Metcalf at present, is 2 floors, 60x35, employing 10 persons. The increase of his business has compelled him to seek for larger space, for conducting the same, where, by the aid of more machinery and assistants, he hopes to be able to meet the demand for the articles he manufacturers. Mr. Metcalf commenced business as the successor of N. P. Towne & Son, in April, 1868.

THE OLDEST ESTABLISHMENT IN THE COUNTRY.

WILLIAM A. METCALF,

Successor to N. P. Towne & Son,

Manufacturer of

Bobbins and Spools,

For all kinds of

Cotton, Woolen, Flax, Linen and Hemp Work.

PAWTUCKET, R. I.

D. D. SWEET & CO.,

Manufacturers and Dealers in

FIRST CLASS

Doors, Sash, Blinds, Shutters

—— AND ——

Rabbit Slat Inside Blinds.

The attention of Hardware, Sash and Blind dealers is called to our Excelsior and Sweet's double acting Blind Fasteners; the best in use, and of which we are the sole manufacturers.

Glass of all kinds and Glazing. Blinds Trimmed and Painted.

Salesroom,

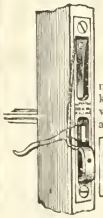
66 CANAL STREET, - - Providence, R. I.

Manufactory,

BROAD STREET, - - - Pawtucket, R. I.

JENKS' WINDOW SPRING.

For Sale by all Wholesale Hardware Dealers in this City.



H. F. Jenks' Patent, Feb. 21, 1865.

The Engraving represents a valuable improvement by H. F. Jenks on the Foster Spring, well known for many years in the N. England States. It is very simple, comprising a *Steel Spring* secured to an *Iron Frame* by a Screw, by which the Spring can be adjusted to suit a light or heavy sash. The pressure of the Spring against the jam casing holds the sash at any point, and prevents any rattling arising from *imperfectly fitting* Sash.

☞SEND FOR CIRCULAR.

D. D. SWEET & CO.,

Agent for North Eastern States,

PAWTUCKET, R. I.

H. D. ARNOLD,

Agent for Middle and Western States,

PAWTUCKET, R. I.

Dennis Martin calf and sheep roller skin manufacture. Commenced business in 1840. Employs 6 persons occupying a two story building 40x28. He finishes about 25,000 skins per year.

Berney & Callaghan book clasp and brass ornament manufacturers, occupy a room in Greene's Mill, 75x22. Employ 20 persons. Commenced business in 1864. Manufacture 1,200 clasps per day.

Greene Bros., thread, cable laid welting cord, harness and druggists twine manufacturers, occupy a floor 30x50 ft. in Greene's mills, owned by them. Employ 12 persons, manufacturing about 1,000 lbs. of thread per week. Their motive power is furnished by water.

One of the largest establishments for the manufacture of leather belting, calf and sheep roller skins in the State, is that of James Davis & Co. The business was established in 1847 by James Davis, who admitted M. P. Bacon, in 1864. They occupy a four story building 50x111, with additions two stories, about 150x40. Employ 40 persons, doing a business amounting to $220,000 per year. Motive power furnished by a 15 horse power upright engine, made at South Boston, with two cylinder boilers, 30 in. by 24 feet. A new article of manufacture has lately been introduced, that of manufacturing fire hose, which is taking quite a force to supply the demand.

Kenyon & Son, small ware, bed lace, braids and tapes. This firm commenced business in 1868. They use 2 winders, 6 weavers, 1 warper, 1 spooler and 1 maker up. Employ 12 persons.

Payne & Mathewson, spooler and spindle manufacturers and general machinists, successors to Holmes & Payne, who commenced business in 1865. The new firm succeeded in March, 1868. Occupy a floor 37x75; power furnished by water; use 9 lathes, 1 upright drill and 1 spindle griuder. Employing 12 persons.

The oldest firm in their branch of business in the State is D. D. Sweet & Co., manufacturers of sash, doors, blinds and shutters, and also reed ribs, occupy over 20,000 feet of room in buildings owned by them near the depot. They have also another large shop and counting room 66 Canal street, Providence. Their power is furnished by Fairbanks' patent engine, 40 horse power. They have also three cylinder boilers with Thayer's patent grates. Their machinery consists of 1 rib sticker and a saw table, 3 power mortising machines, 2 foot mortising machines, 3 tenoning machines, 1 patent blind-style borer, capable of boring 4,000 holes an hour, 8 circular saw-tables, J. P. Barstow's slat tenoning machine, 2 planers, 1 blind slat planer, capable of planing and rounding the edges of 75 slats per minute, 2 sash stickers, 2 moulding machines, 2 groovers, 2 boring lathes, 1 blind staple machine, capable of making and boring 100 staples per minute, 1 swing saw for cutting lumber, 1 jig saw and two turning lathes. They have 45 employees, including 8 glaziers. This firm also has the agency for the New England States for Jenks' improved window spring and concealed sash lock. They are also sole manufacturers of *the excelsior Sweet's double acting blind fastener*, invented by D. D. Sweet, who has had large experience in the use of various kinds for the last thirty years, and thinks he knows the points needed in a blind fastener as well as any outsider, offers this to the public as the very best—the least liable to get out of order, by rust or paint, to prevent its working. Simple—strong and easily applied—being let in or screwed on to lower edge of rail. The blind cannot be opened by the outside lever.

S. MERRY & CO.,

Bleachers and Dyers.

36 Pleasant Street, Pawtucket, R. I.

Thread Yarns, Skirt and Corset Yarns, Skein and Beam Yarns, Knitting Cotton, Tape, Netting, Braid, Shoe and Corset Lacings bleached and colored in a thorough manner, at short notice. Careful attention to matching silk and wool samples.

PRICE LIST SENT ON APPLICATION.

SAMUEL MERRY & Co. The father of the senior member of this firm, (Barney Merry,) commenced the manufacture of ginghams in connection with the dye business, in 1805. The manufacture of ginghams was suspended after a time and more attention given to dyeing and bleaching. The son, brought up in the establishment, and learning every detail of this constantly increasing business, succeeded his father, who died in 1847. The main building, 100x70, is three stories, with many additions, built at different times, as their business increased; among them a large dye house, one story, 120x70. They also occupy a dye house across the street from the main building, 165x25, one story. They employ 45 persons, and the capacity of the bleach and dye house is $3\frac{1}{2}$ tons per day. Benjamin Merry, the brother of Barney, was associated with him for some time. In 1866, Robert D. Mason was admitted to the firm, being a nephew of Samuel Merry. The engine, 25 horse power, was built by Booth Bros., of this place; the boilers, three in number, are flue boilers, two of them manufactured by Providence Steam Engine Co., the other by Gideon C. Hicks. Recent improvements have made this one of the most complete dye and bleach works in New England.

GOODMAN & Co. successors to Goodman & Reynolds who commenced business in 1862, now occupy a five story stone building 80x40, with three buildings adjoining, 40x40 each, for office, packing and storage. Employ 110 persons, using 12 knitting looms, imported; 11 weaving machines, 5 sets of cards, 8 jacks, 4 twisting frames. They manufacture nubias, hoods, comforters, and all styles of fancy knitted goods. They use 75,000 pounds of pulled wool every year.

LEWIN, KENYON & Co. commenced business in 1867, being successors of Lewin & Kenyon, who were established in 1848; occupy a 4 story wooden building, 32x40; employ 60 persons. This firm have built several mills in Rhode Island and Massachusetts, being the oldest in the State in this line of business. The new dam across the Blackstone at Woonsocket was built by this firm, being 210 feet long, built of wood. Beside this, they manufacture water wheels, tubs, kiers, &c. The works are located near the bridge on the east side.

A. CHAPLIN & Co. occupy 3 rooms 33x45 each, for the manufacture of ladies' and gents' boots and shoes; employ 40 persons, manufacturing about 40 pairs of shoes and 36 pairs of boots per day; commenced business in 1867.

MOORE & FOSTER occupy 1st floor of wooden building on the east side near the bridge 90x30. Commenced business January, 1868. Employ 20 persons; using 24 spoolers, 2 twisters, 144 spindles each.

Z. P. & J. S. WHITE occupy buildings for the manufacture of machinery castings of every description, as follows: The main building is 1 story, 40x80, used as a foundry, besides store house and counting room. Employ 18 persons, turning out about 3,000 lbs. of castings per day. Their motive power is furnished by a 6 horse power engine, built by Kendall, Boston, Mass., at the time this firm commenced business, 1847. This is the only concern in Pawtucket that make castings exclusively.

PAWTUCKET STRAW WORKS, Edwin Jerauld, proprietor. Commenced business in 1865, occupying 2 stories of a wooden building 80x30 feet, junction of Front and Walcott streets, east side. Employ 50 persons in the works, beside many working by contract through the surrounding country.

BRIDGE MILL COTTON MANUFACTURING Co., incorporated 1865. A. N. Beckwith, President, H. N. Ingraham, Agent. This company occupy a 4 story wooden building 80x43, for the manufacture of 44 shirtings. Employ 68 persons, use 112 looms, 31 cards, 4,800 spindles, working up 14 bales of cotton per week, and turning out 25,000 yards of cloth.

GEO. B. PERRY & Co. Hames. Commenced business in 1848, now occupy 2 floors in a new wooden building 30x40, rear Rough & Ready Engine Co.'s house; employ 9 persons, turning out about 25 pairs per day. Most of the goods made at this manufactory find their way to California.

J. I. BOSWORTH occupies the lower floor of a two story wooden building, 35x50 feet, situated in the rear of No. 13 Mill street, for the manufacture of all kinds of jewelers' tools, &c. He commenced business in April, 1864, employing 8 persons, running 3 planers, 5 engine lathes, 4 milling machines, 1 upright drill; power furnished from water wheel from building adjacent.

S. T. HORNBY & BROS. commenced business in February, 1867, occupying a building on Exchange Place, 26x50, third and fourth stories, for the manufacture of lounges, mattresses and cushions; use 1 moulding machine, 1 circular saw, and 1 scroll saw; power furnished from one of George Brayton's oecilliating six horse power engines. Employ 20 hands.

THOMAS & Co. occupy a 4 story building 50 x 80, rear of Pleasant street, for the manufacture of card and collar board, employing 30 persons, using an engine 50 horse power, 4 cylinder boilers. This firm commenced business 1860, as successors of Ryder, Thomas & Co., who commenced in 1856, and Bliss, Potter & Co., who commenced in 1844.

GEO. H. FULLER, formerly Robinson & Fuller, at South Attleboro, Mass., commenced business here about September, 1862, for the manufacture of jewelers' jobbing materials, occupy second story of building 75x30, and employs 17 persons.

N. S. COLLYER & Co. occupy a two story building 80x35, for the manufacture of machinery, and jobbing generally.

DOUBLE ENGINE.

COLE BROTHERS,

BUILDERS OF

Improved Double and Single

STEAM

Fire Engines,

CORNER OF MAIN AND BAILEY STREETS,

Pawtucket, Rhode Island.

Use 14 lathes, 3 planers, 4 drilling machines, 1 gear cutter, 1 pulley machine, and 1 boring mill. Employ 20 persons, and do a business amounting to $35,000 per year. This firm was established in 1850.

THE old adage that Fire is a good servant, but a bad master has been so often exemplified by the wholesale destruction of property in large cities, that it seems strange that the best means for preventing conflagrations should not have been more amply supplied to fire departments in all populous communities. It is equally a matter of surprise and regret, that after the superiority of steam fire engines, over those worked by hand, had been satisfactorily demonstrated, they were not sooner and more generally introduced into use. Had this been done years ago, many millions of property would have been save from destruction, many a family saved from beggary, many a merchant and manufacturer from bankruptcy, and, though last, not least, many a precious human life would have been spared from an untimely end.

The introduction of steam fire engines has been too long neglected, in view of their manifest efficiency, and of the perfection to which they have been brought, by mechanical ingenuity, guided by years of practical experience. At present, however, people are awakening to a sense of the increasing danger from conflagrations, resulting from greater density of population and the increased use of explosive articles; and we believe that some amends will be rapidly made for past errors of omission.

Among the leading fire engine manufacturers in the United States, are the COLE BROTHERS, located in a brick building near the railroad, 40 x 75 feet and 2 stories high, with a blacksmith's shop attached.

One of the most objectionable features of all steam fire engines, hitherto, has been their failure to draught water from deep wells, and also failures on short draughts, occasioned by small sticks or sediment getting under the valves, thus rendering the engines useless, and causing serious losses by fire. These objections they have entirely overcome. Their patent consists in the syphon form of the suction-pipe to the pump, which makes it a self-charger, and it cannot fail to draught water under any circumstances. It has been tested with the most satisfactory results where other engines have proved themselves useless. It is considered by all mechanics and leading insurance men one of the most important points in a steam fire engine, and no engine is considered perfectly reliable without it.

By the patent piston rod, which is made of one continuous rod of cast steel instead of being in two pieces like all other engines, they avoid sticking on the centres, also cramping of the sliding box, causing extra friction. The friction on the sliding box is no greater when the engine is doing its greatest work than when running light.

By the improvement in their boiler, which enables them to use all kinds of water in the boiler, without foaming, as is often the case. It enables them to use dry steam in the steam cylinder, and avoids leaky points from being strained, caused by water raising in the boiler and passing over to the cylinder with the steam. Their pump, is also so constructed that all of the valves can be taken out in five minutes. Their machines stand steady and have no motion whatever or chaffing of hose.

PAWTUCKET MANUFACTURING CO., print cloths. Alanson Thayer, Agent. This firm commenced business in 1845, in a wooden building, 7 stories on one side and 5 stories on the other, 74x43, with an ell 43x16, built by them for their use. They use 185 looms, have 7,200 spindles; employing 125 persons, using up 15 bales of cotton, and turning out 36,000 yards per week. Office, Main street.

DANIEL A. CLARK,

Manufacturer and dealer in

COFFINS, CASKETS,

BOXES, ROBES, PLATES, HANDLES, &C. &C.,

2 COMMON ST., COR. MAIN, PAWTUCKET, R. I.

Also Manufacturers of

Wood Coffin Trimmings,

(CLARK'S PATENT.)

☞ Corpse Preservers ready for use at SHORT NOTICE. ☜

LEBANON MILL CO., successors to R. B. Gage & Co. in 1868, who commenced business in 1859. The present firm manufacture cotton yarn and stockinet goods in a 2 story building 40x70 with basement. Capacity of the mill 4,320 spindles, and employ 25 persons. This manufactory is located at Ten Mile river, 2½ miles from the village. The office is in Pawtucket with the Pawtucket Manufacturing Company.

PAWTUCKET TACK CO. commenced business in 1865, occupying one half of basement in all, about 3,000 square feet. Employ 10 persons, using 12 tack machines; manufacturing 1,200,000 tacks per day, all kinds consisting of brads, shoe nails, &c. The business is conducted by Geo. H. Cooper, under the above name.

PAYNE & TAYLOR occupy one floor of building 130x40, besides other rooms for the manufacture of hair cloth for paddings. Commenced business in 1848, employing 20 persons, using 50 looms, Lindsley's patent, manufacturing 10,000 yards per month, the power is furnished by water.

H. A. BRIGGS & CO. manufacture cotton yarn bandings, ropes, lace leather and picker strings. This firm commenced business in 1849, being King & Briggs at that time; they have a manufactory in this place, three stories, 30x50, for the manufacture of yarn. Also, a leather manufactory at Attleboro', and two for batting at Foxboro' and Mansfield, where the articles are made by contract. Employ 40 persons. They have also a counting room and store house at this place, and a rope walk at Coventry, R. I. They do a business amounting to $200,000 per year. The firm now is H. A. Briggs, Russell Briggs and H. A. Briggs, Jr.

DEARBORN & ROUSE, safety blind catch and lock manufacturers, occupy a room in basement of Greene's mills. This firm is composed of two enterprising young men, who manufacture the above, the best thing for which it is designed, in the market. No pins, no rivets, no joints, to make it get out of order.

THOMAS LEWIS occupies the lower floor of brick building in the rear of 37 Mill street, 30x45, for the manufacture of a clutch regulator for regulating water wheels, thereby keeping the correct time; commenced business in 1830.

G. W. KIMBALL occupies the lower floor of a wooden building, 25x35, located at Front street, corner of Cottage, for the manufacture of pop corn cake; commencing business in June, 1868, employing 4 persons, and has facilities for making 5 dozen every five minutes.

ELISHA GODFREY, Cottage street, corner North Bend, commenced the manufacture of cotton batting and dealer in cotton waste, &c., in 1865, in a building 2½ stories, of wood, 35x25, with an L 22x35, employing 8 persons, working up 3,500 weight of stock per day, turning out 500 lbs. of cotton batting. The engine is of 30 horse power, built at Lawrence, Mass. Business amounts to $25,000 per year.

JAMES ARNOLD & SON, Dexter street, occupy a 3 story brick building 40x75 feet, for the manufacture of the improved upright spooler; also, spindle bolsters, &c. Employ 15 persons. This firm have also a machine shop 30 x 66 ft. Commenced business in 1835; doing a business of $20,000 per annum.

THE PAWTUCKET THREAD CO. was incorporated 1866, doing a business of $300,000 per annum. They occupy a brick building 100x65, with boiler room attached. The works are driven by a 40 horse power engine, Greene's old patent. They employ 100 persons, and turn out about 2,000 dozen of spool thread per day. Capacity of the mill 1,064 spindles. This company make a 2,400 yard thread, which is a very superior article for machine or hand sewing, there being but one other concern in the country that make it. The officers are James H. Cutler, President; Charles B. Jenks, Treas.

HENRY F. BISHOP & CO., occupy second story of brick building 40x75 feet, for the manufacture of reed and harness, and general supplies for mills. This firm commenced business in August, 1868. Employ 5 persons, using 3 reed machines, 4 drawing frames and 1 pair of rolls.

WILLIAM COOKE occupies a room 80x40 feet, for the manufacture of yarns and thread; employing about 16 persons; turning out 1,000 lbs. per week. Commenced business in 1861.

THE SENSATION COLLAR CO., Greene's mills. This company commenced in September, 1868. James Cunningham, Agent. The works are not in operation at present.

DANIEL A. CLARK, manufacturer of coffins, caskets and Clark's patent wood coffin trimmings, 2 Common street, corner Main street, a building 40x80 feet, 3 stories. Mr. C. commenced business in 1861, and has met with much success in the manufacture of wood coffin trimmings. He has lately patented a new corpse preserver that he claims obviates all the difficulties in similar inventions, keeping the body dry and preserving it for many years.

FAIRBROTHER & FALES, manufacturers of leather belts, picker or moccasin leather and Page's patent sweet fern and chemical lacing. Their main building is 81x35 feet, five stories with ell 70x40 feet, four stories. The works are driven by a 20 horse power engine, and have in their employ sixty men. Their belting is of a superior quality, being made from Philadelphia oak tanned leather, selected expressly for this purpose, of which they use 18,000 sides per year, and tan 13,000 sides picker leather and 34,000 sides lace leather per year. Consume 175 bbls. oil, 26,000 pounds

LITTLEFIELD BROTHERS,

Manufacturers of every variety of Skein

SEWING COTTONS,

Threads for Spooling, Single Yarns, in Cop or Skein, and Two-Threaded Warps, Grey, Bleached or Colored.

Office No. 10 High Street, Pawtucket, R. I.

GEO. L. LITTLEFIELD. A. H. LITTLEFIELD.

tallow, 175 tons coal, besides large quantities of lime, salt, alum and gambia. This establishment is situated near the boundary that divides Pawtucket from Central Falls, and sometimes hail from the latter place.

S. S. Humes & Co., contractor and builders; also manufacturers of circle, gothic, arch-loft and plain windows and door frames, brackets, mouldings, tank and box making, shop No. 11 Broad street, Pawtucket, R. I.

The machinery is on the first floor of Messrs. D. D. Sweet & Co.'s brick establishment, and from their engine the power is obtained, to the amount of about 20 horse.

The machines consists in part of 1 large double surface planer, (Woodbury's Patent), 2 smaller planers; Bartlett's mortiser; 1 large and 1 small moulding machine; 1 irregular moulding machine; 1 tenoning, and 1 grooving machine; 3 swing saws; 3 table matchers; whip, slitting, and squaring saws; &c., &c., occupying for machines, benches, and storage, some 25,000 square feet of floors. Employ 50 workmen. Consume annually for buildings, and caves, boxes, &c., one and half million feet of lumber of various thicknesses. The capacity of this establishment is 300 boxes daily. The amount of business done each year about $100,000. They have done business as carpenter's and builders, for 18 years.

B. P. Clapp commenced the manufacture of chemicals in 1861, admitting in 1865 P. W. Arnold & W. B. Hopkins, the style now being, B. P. Clapp & Co. This firm have 3 laboratories, the largest one located at this place, occupying one-fourth of an acre, one at Coventry, R. I., on the Providence, Hartford & Fishkill Railroad, of one-fourth of an acre, the other at West Greenwich, 6 miles from Greene Station on the Providence, Hartford & Fishkill Railroad; 2 buildings 40x60 and 35x70 feet; at the two last places pyroligneous acid and acetate acid are manufactured. Employ 16 persons; manufacturing 1,500 lbs. of pyroligueous and acetate acids and 3,600 of amonia per week besides naptha, iron liquor, soda, &c.

Slater Cotton Co. Incorporated in May, 1869. Capital $300,000. S. W. Mowry, Agent; S. N. Longee, Superintendent. Their mill is built of brick; the main building, 304x86 feet, 2½ stories high, and was formerly occupied by the American File Co., but it has since been remodelled and nicely fitted up for the manufacture of cotton goods. Attached to the main building are 2 L's 50x50 feet each; also a boiler and engine room 50 x 50 feet, which contains the picker house, they being separated by a fire-proof partition. They also have a cotton, stock and waste house, built of brick, 100 feet long and 2 stories high. They run 314 looms and 20,000 spindles. An engine of 250 horse power, built by the Corliss Steam Engine; supplied with steam from 5 flue boilers 40 horse power each, built by Gideon G. Hicks, of Providence, R. I., drive their machinery.

Littlefield Brothers, manufacture skein thread, warps, printers' twine, seaming twine and thread for winding. They have a mill 106x35 feet, 3 stories, with basement and a shop for finishing, 40x80 feet, 2 stories and basement. They are also proprietors of the Cumberland Mills, located out of the place; running in all 6,100 spindles; turning out 3 tons of work per week.

Pawtucket and Central Falls are getting to be the head centre for thread in this country. The Conant Thread Co., a branch of the Coats' establishment, in Europe, are now having built machinery for the purpose of establishing a large thread manufactory at Central Falls. The company was incorporated in 1869. Officers not yet chosen; arrangements have not been perfected far enough for us to give any reliable information in regard to the size of buildings, No. of hands to be employed or No. of machines to be used.

Cyril Manchester occupies at Central Falls, near this place a 2 story wooden building 25x40 feet, for the manufacture of silver plated coffin trimmings. He commenced business in 1861. Employs 20 persons and does a business of $15,000 annually.

The American File Company was incorporated 1863. Capital $200,000 for the manufacture of machine, and hand cut files. This Company was formerly located at Pawtucket, but have sold their building to the Slater Cotton Co.

The buildings occupied are at Central Falls, they are 110x35, 1½ stories, brick, and 110x26, 1 story, wood. Will employ when in full operation 125 persons. Stephen A. Jenks, President; Nahum Bates, Treasurer.

The Company contemplate many improvements and an enlargement of the business.

The thread establishment of Messrs. Greene & Daniels is located just over the line from Central Falls in Pawtucket, but both of the proprietors and a large portion of the employees reside in Central Falls, and the establishment is claimed by the villagers as belonging to them, although all letters are sent to and their banking and express business transacted at Pawtucket. This establishment is one of the largest in the world. The senior partner has been engaged in the business some 40 years. Mr. Daniels, although not so long engaged, has a practical knowledge of the business, and has invented a considerable number of machines, which are claimed to be superior to those used in other thread manufactories.

The main building is 410x67 feet, four stories high, with an attic and French roof, besides this is an office building 42x25 feet, two stories and basement; also, a bleach and

B. P. CLAPP & COMPANY,
MANUFACTURING CHEMISTS.
PAWTUCKET, RHODE ISLAND.

Manufacturers of *Acetic Acid* and *Aqua Ammonia*, of various grades, for Calico Printers, Manufacturers, Photographers, and Druggists. *Nitrate Ammonia*, for Dentists. *Wood Naptha*, (Methylic Alcohol) for dissolving Aniline colors. *Pyroligneous Acid*, *Iron Liquor*, and *Solution Acetate of Lime*, for Calico Printers.

dye house. In the boiler room are four tubular boilers, 16 feet long, 4½ feet in diameter; also two upright boilers, 7 feet in diameter. The engine located in the basement of the main building is one of Corliss's largest size, 34 inch horizontal, of 500 horse power. The wheel is 20 feet in the clear, by 8 feet face, built in one solid piece. On the different floors in the establishmeut are one hundred 30 inch self stripping cards, a French comber, (recently introduced into this country,) 19 of James S. Brown's speeders, one Van Winkle cotton opener, 3 of Whitins' 30 inch coppers, 12 of Whitins' drawing frames, 48 of Fales, Jenks & Sons spinning frames, 128 spindles each; also a sample frame by the same makers, which took a gold medal at the American Institute Fair; 11 of Mason's mules, 1600 spindles each; 96 winding machines, of Greene & Daniels own invention and make; 32 dressing machines also of their own inveution, and 44 twisters, of Fales, Jenks & Sons, 5400 spindles. Altogether the firm run 23,744 spindles, and when in full operation produce 36,000 dozens 200 yards of spool cotton weekly. They put up all numbers of spool cotton from 8 to 100, white and colored, and spin all the yarn for the same. Throughout the establishment the machinery is of the first class, and especially adapted to the working of both the common staple and Sea Island cotton.

The United States Flax Manufacturing Co., Wm. Sprague, President, Amasa Sprague, Treasurer, is located at Central Falls, in the building erected a few years since by Fales, Jenks & Sons, for the manufacture of machinery. The main building is of brick 300x63, 3 stories in height with an ell of the same height 73½x60 feet. The flooring of the buildings covers an area of more than two acres. They have erected several blocks and cottage houses for the convenience of their operatives, the latter of which number when the establishment is in full operation 700. A Corliss engine of 500 horse power supplies the impetus for the machinery. This company manufacture cotton goods, burlaps, towelling, &c., &c.

The New England Cork Co. manufacture machine cut corks; also import and deal in cork wood and corks. Their machinery consists of five cutters, Goodspeed's patent and circular knife. They have 10 employees, and turn out 60 gross per day, ranging in sizes across the top, from one-half to three inches. Their material is imported from Spain.

James M. Taft & Co. Threads. Commenced business 1861, occupying one floor in Green's mills. Employ 60 persons, manufacturing about 500 doz. spools of thread per day.

William H. Haskell & Co. occupy 8,000 square feet, in a building erected by them six years ago, for the manufacture of coach screws, bolts and nuts. They have 12 hot presses, 7 bolt cutters, 6 nut tappers, 2 bolt pointers, 8 machines for cutting screws, 5 turning lathes and 1 planing machine. Their power is furnished by a 25 horse power engine of the Corliss pattern, with cylinder boilers; employ about 50 hands and do a business amounting to $100,000 per annum.

PORTSMOUTH GROVE, 59½ miles from Boston, and 7¾ from Newport. A station on the Old Colony and Newport Railroad, in the town of Portsmouth. This place during the war was used as a hospital for United States soldiers.

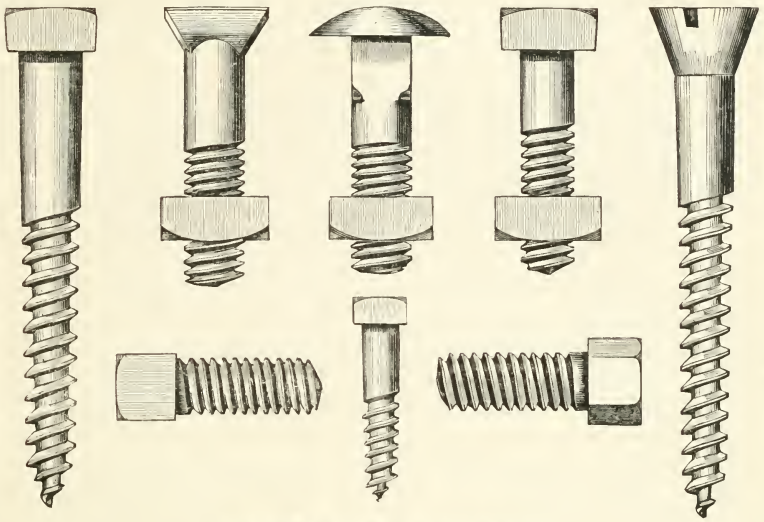
PROVIDENCE, situated 188 miles from New York, 43½ miles from Boston, 30 miles from Newport, 43¾ miles from Worcester, 90 miles from Hartford, in latitude 41° 49′ 22″, longitude 71° 24′ 48″ W., is situated at the head of Narragansett Bay, and is the terminus of the Boston and Providence, Providence and Stonington, Providence and Worcester, Providence Hartford and Fishkill, and Providence, Warren, Bristol and Fall River Railroads. The city was incorporated in 1832, and is divided into two unequal parts by the Providence River or harbor, which is an outlet of a beautiful sheet of water, about one mile in circumference, the head waters of Narragansett Bay. It is encircled by a substantial iron fence, surmounted with gas lights at intervals, which at night are lighted, forming a very pleasing sight, the whole surrounded by a park, laid out in beautiful walks, shady trees, presenting an inviting and pleasant appearance to the stranger as he enters the city by rail from either New York, Boston, Worcester or Hartford. Most of the private buildings which were erected previous to 1860, were built mostly of wood, a marked improvement has been made since that time by the erection of hundreds of elegant residences, the majority of which have been built of brick and brownstone.

The public, benevolent, and disciplinary institutions are extensive, elegant and costly edifices. One of the oldest and most attractive business marts in the country, and one of which every native of Providence is proud, is the Arcade, a beautiful granite edifice, erected in 1828. It is 226 feet long, 3 stories high and 80 feet in width, extending from Westminster to Weybosset, the two principal streets of the city. In this building are 76 stores, affordiug persons the opportunity of purchasing anything that goes to make a gents or ladies wardrobe complete. The Whatcheer building, on Market Square, is a freestone building, occupied by banks, offices, and an elegant Masonic hall. This name is derived from the first salutation made to Roger Williams by the Indians, while effecting a landing on Slate Rock. The Custom House, a large granite structure, is situated on Weybosset street, and contains the post office and offices of the United States Government belonging to this district. The old Market Building contains the offices of the city government. The State House, on Benefit and North Main streets, is a brick structure, built many years ago. The Railroad Depot, situated on Exchange Place, is built of brick, and is one of the most convenient and elegant depots in the country; with one exception, all the trains of the different railroads entering and leaving from this building. The freight houses are large and commodious, and located near the business portion of the city. Among the more remarkable church edifices in this city and North America, is the First Baptist church, the oldest in America, organized in 1639. The Commencement exercises of Brown University are held in this edifice. The number of churches in the city is 59. There are 2 morning, 2 evening and 3 weekly newspapers published in this city.

The Butler Hospital for the Insane, is situated on the west bank of the Seekouk river, which here expands to a mile in width, affording a delightful prospect. The grounds that surround the institution are extensive, comprising about 115

WM. H. HASKELL & CO.,

Manufacturers of



GIMLET-POINT

Coach Screws

BOLTS AND NUTS

Of every description, suitable for all kinds of Machinery,

Agricultural Implements, Water Wheels, Tubs, &c.,

Of a superior quality, at low Prices.

PAWTUCKET, R. I.

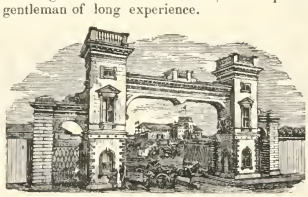
Orders Solicited and Promptly Filled.

acres. The Dexter Asylum, situated on Hope street, on elevated ground, is a substantial brick building surrounded with grounds comprising about 40 acres, the whole enclosed by a stone cemented wall, 10 feet high, costing upwards of $20,000. The Reform School was established in 1850—occupies the building formerly known as the Tockwotten House, situated on the heights in the south eastern part of the city, from which is had a fine view of the Narragansett Bay. Near the Reform School, and enjoying the same beautiful scenery, is the Old Ladies' Home, a brick edifice erected a few years since, at a cost of over $30,000. Only those persons of American parentage are admited to this institution. The new Providence Hospital recently erected, is an elegant edifice, situated on Eddy street. It is probably as expensively built and as well arranged as any hospital in the United States. The State Prison is situated opposite the Railroad depot across the Park, mentioned above, and is a self-supporting institution. The "Friends' School" is situated on elevated ground in the suburbs of the city, and comprises two large and spacious buildings, one of which has been lately built of pressed brick with granite trimmings. The architecture of the building is modern, with French roof. The whole surrounded by spacious grounds, containing 43 acres.

One of the oldest and leading colleges in the country is Brown University, under the direction of the Baptists, founded in Warren in 1764, and removed to this city in 1770. It is situated on elevated ground and commands a fine view of the surrounding country. It comprises 5 principal buildings and is richly endowed. It has a library containing about 36,000 volumes. The grounds connected with the college buildings are very extensive and are shaded by our favorite New England Elm. Among the more interesting features of the University is Rhode Island Hall, which contains the portraits of twenty-nine distinguished men, many of whom have, in their different spheres, assisted in giving prominence to the State, not only in the history of the nation, but throughout the world.

The Athenæum, incorporated 1836, has a library of about 30,000 volumes. The Mechanics' Association, Franklin Lyceum and Franklin Society all have large libraries.

Providence takes much pride in her Public Schools which are second to none. For the past few years, a marked improvement has been made in the building of substantial and elegant school houses which are an ornament to the city. The best teachers are engaged at liberal salaries, the whole in charge of a school committee, and superintended by a gentleman of long experience.



MAIN ENTRANCE TO NARRAGANSETT PARK.

The Narragansett Trotting Park, situated about 4 miles from the centre of the city, in the town of Cranston, is decidedly a city institution, and the sight-seer or traveller leaving it out of his route can tell you but little of what Providence is. What nature has not done in providing a level of acres, sufficient for the purpose art has accomplished. The land is high, dry, and susceptible of the highest cultivation. There is within the enclosure, about ninety acres, so arranged and divided as to secure each department its most appropriate and legitimate place, with ample room for every needed thing without crowding. The grounds are surrounded by a board fence, painted, 12 feet high. There are 3 places of entrance and exit. The front or main entrance is composed of 2 towers with cosy rooms for ticket offices, and like rooms in the second stories. A grand and elaborately finished arch spanning the carriage drive and connecting the two. The structure like the other buildings, is put up in the most substantial manner, having for the base, hewn granite, from the Oneco ledges, laid with as much skill as if it was the foundation of a public building for the city or State. The design of the arch is heavy massive and grand.

The main building is a mammoth structure and astonishes the multitude of visitors who visit here. In its open area on the second story 5,000 persons can sit and with unobstructed vision sweep every inch of the one mile track which lies in the form of an ellipse before them. In front of this vast inclined plane, is a substantial railing which no pressure of crowds can break down, the seats rising from the front so that each occupant has an unobstructed view. Six broad and easy flights of stairs ascend from the promenade in front of the area and doors lead to it from the ample reception, side and committee rooms of the main building and tower. Five thousand people could vacate the place in a very short space of time and without inconvenience. Directly under this is a vast hall, capable of holding all who may come to these grounds, divided into lounging rooms, restaurants, &c., &c. But we have entered the building from the wrong side. Let us go back to the entrance of the tower. Passing up broad but finely cut granite steps, one enters the tower to find himself in a capacious hall with entrances upon three sides. In the rear on the right and left are doors of communication to the reception rooms, one assigned to the ladies the other for gentlemen. In the hall are seen a broad flight of steps leading to the second story. Arriving there are found like doors upon either hand leading to committee rooms, retiring rooms and leading to the covered seats outside which have already been described. Rising still another story and you enter from the tower a vast arched hall 108x 25 feet. Passing back into the tower and ascending one more flight of stairs, one enters one of the most airy and beautiful rooms to be found in the whole building, where a vast extent of territory comes within reach of the eye, including the city of Providence.

The judges' stand in the centre and front, facing the main building, is a beautiful pagoda-like structure, elaborately finished, unique and tasteful. The track is laid out in an ellipse and contains no angles, and is one of the most perfect in the country. The distance around is exactly one mile. The largest axis of the ellipse is 2.160.4 feet; the shortest 8.20.4–. The inside area is 33¾ acres. It is acceeded by all, that for comprehensiveness of design, stability of structure, convenience in internal and external arrangements, beauty of finish—in a word, in every thing which genius and wealth could furnish to make a race course and fair grounds, from the splendid arch of entrance to the pagoda-like structure, used as the judges' staud, the Narragansett Trotting Park exceeds any thing of its kind,to be found on this continent, and challenges the admiration of Europe.

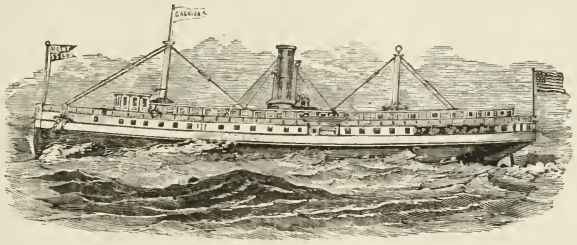
The city, in 1869, voted to purchase a tract of land in peninsular shape, situated on the shores of Narragansett Bay, containing about 400 acres. It is situated in the south-western part of the city, in the new territory recently annexed. No other place, is at present, of so much general interest to the citizens of this city, and it bids fair to become a household word among the masses. The distinguishing characteristic of the proposed Park is its situation to receive the sea breeze as it comes up from old ocean, salt laden and fragrant with sea weed. The promontory of this Park stretches square across Narragansett Bay, leaving room only for the channel

Providence and New York Steamship Company.

DAILY LINE, (Sundays Excepted,) BETWEEN

PROVIDENCE & NEW YORK!

For Passengers



and Freight.

GALATEA,

Capt. J. W. Nye.

Leave Providence from Fox Point Wharf, Summer Months at 5. 30 P. M., Winter Months at 4.30 P. M.

ELECTRA,

Capt. J. Mott.

Leave New York from Pier 27 North River, Summer Months at 5 P. M., Winter Months at 4 P. M.

Cabin Fare, $3.00. Deck, $2.00.

Freight taken at Low Rates, for

NEW YORK, PHILADELPHIA, BALTIMORE,

And all points South and West.

The large, powerful first class Passenger Steamers, ELECTRA and GALATEA, have been thoroughly refitted and put in first class order for business; and passengers will find the accommodations and attendance to be first class, and the Seameas to be the most comfortable and reliable for travel between Providence and New York.

Horse Cars connect with the Steamers; leaving Passenger Depot, Exchange Place, at 5-10 P. M., and Fox Point Wharf on arrival of Steamers from New York, connecting with all early trains.

State Rooms and Tickets can be secured at G. H. Whitney,s, No. 3 Westminster St., or on board the Steamers.

This Company are also running in connection with the Passenger Steamers, the large and powerful Freight Steamers, METIS, THETIS, DORIS and others daily each way, transporting freight from New York to Providence; connecting with the Boston & Providence Railroad for Boston, Mansfield, Taunton and New Bedford; and with Providence & Worcester Railroad for Woonsocket, Milford, Southbridge, Worcester, Fitchburg, Groton Junction, Lowell, Lawrence, Haverhill, Nashua, Manchester, Pepperell, Concord and all points in eastern New England.

Steamers of this line land at Pier 27, North River, foot of Robinson street. One of the largest and most conveniently arranged piers in New York, with new sheds covering the entire length, with 250 feet shed room fronting on West Street, for the delivery of merchandise, which facilitates early delivery, and doing away with the necessity of extra cartage, sometimes charged in New York for detention. For further information, apply to

E. H. ROCKWELL, Agent,
Fox Point, Providence, R. I

ISAAC ODDELL, Agent,
Pier 27 North River, New York.

B. BUFFUM, PRESIDENT AND GENERAL MANAGER.

AMERICAN STEAMBOAT COMPANY.

DAILY EXCURSIONS.

Providence, Rocky Point and Newport.

1869. SUMMER ARRANGEMENT. 1869.

TO GO INTO EFFECT ON WEDNESDAY, JUNE 23d.

The American Steamboat Company's Steamers, "BAY QUEEN," Capt. SAMUEL ALLEN, and "CITY OF NEWPORT," Capt. GEORGE H. KELLEY, will run daily, (Sundays excepted,) between Providence, Rocky Point and Newport, leaving each terminus of the route, as follows, viz.:

Will Leave Providence.		Will Leave Newport.	
8.30	The Bay Queen, at 8.30 A. M.	The City of Newport at 7 A. M.	7.00
10.00	" City of Newport, at 10 A. M.	" Bay Queen at 11 A. M.	11.00
2.00	" Bay Queen at 2 P. M.	" City of Newport at 1.30 P. M.	1.30
5.00	" City of Newport at 5 P. M.	" Bay Queen, at 4.30 P. M.	4.30

EXCURSION TICKETS.

Providence to Rocky Point (only,) and back the same day, - - - - - 50 Cents.
Providence to Newport (only,) and back the same day, - - - - - - 75 Cents.
Rocky Point to Newport (only,) and back the same day, - - - - - - 60 Cents.

☞**NO HALF PRICE EXCURSION TICKETS.**☜

REGULAR TICKETS.

Providence to Newport, - - - - - - - 50 Cents.
Children under 12 years of age, - - - 25 Cents.
Providence to Rocky Point, - - - - 35 Cents. ☞No half price.
Rocky Point to Newport, - - - - - 35 Cents. " " "

SATURDAY AFTERNOON EXCURSIONS.

Passengers by the "Bay Queen" at 2 P. M., or the "City of Newport" at 5 P. M., (on Saturday ONLY,) can by calling for a "Monday Morning Excursion Ticket" procure one (for 75 cents,) that will entitle the purchaser to a return passage, on the following Monday, by the "City of Newport" at 7 A. M., or the "Bay Queen," at 11 A. M. (only.)

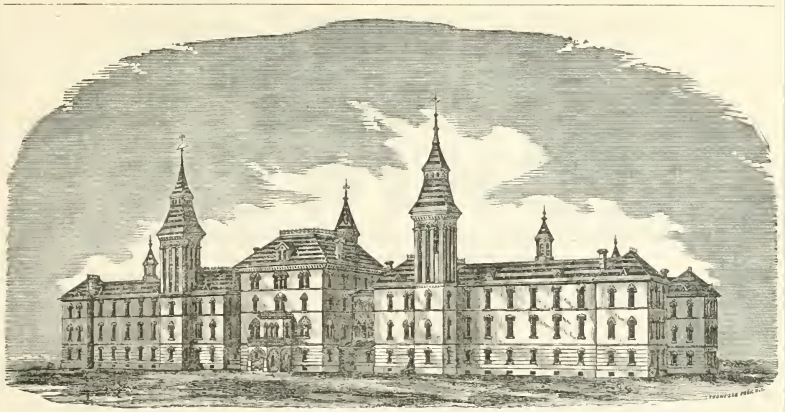
In no case will these tickets be received otherwise than in accordance with this advertisement.

☞ Tickets to be purchased at the office on the wharf, before going on board the boats.

The Winter arrangement commences about October 1st, each year, for details of which, see Providence daily papers.

N. B.—Sabbath Schools and other Organizations, desiring to make Excursions down the bay, can make arrangements by applying to

F. MAURAN, Agent,
At Office on Steamboat Wharf, Providence, R. I.



RHODE ISLAND HOSPITAL.

to wind around the eastern and northern shores of the future Park. The Bay where it abuts against this headland is a mile wide,—an arm of the sea, broad and deep enough to bring with its tide, water still cool from the ocean. As is usual on broad water courses, the sea breeze, almost every summer afternoon, draws up the Bay. The hills and bluffs of the promontory dissipate this breeze, or deflect it eastward, so that often, while the city is sweltering in the summer heat, the air on the Field's Point peninsula is delightfully cool and tonic.

This, not only connects it with the ocean, but gives it a vista of water view, rarely excelled in the United States. The houses dotting the shore, at Portsmouth Grove, and on Prudence, arrest the eye looking over fifteen miles of water. But, still more, the commanding position of the Park, on the Headland of the Bay, relates it to the people of a large part of the State, making it an object of State interest, and State pride. In its future development, the Park promises to become the crown of the Bay. Every passenger steamer on the river will stop at its landings. From above, below, and across, it will have its own ferry boats. The boating interest, also, of the upper part of the Bay, both for pleasure and profit, must receive an immense expansion.

The Highlands are a group of hills, covering perhaps 150 acres, thrown together in picturesque confusion, almost always arresting the eye of the excursionist, on the passing steamboats. The view from Sassafras Hill, looking south, has been frequently compared to a miniature White Mountain range, while the views north and east from this point show an unequalled panorama of the city and the East Providence shore, with an endless procession in the foreground of boats, vessels, tugs and steamers. The Central Park of New York, contains 632 acres, exclusive of the Croton Reservoirs; but for landscape and breathing space, the Bay gives expansion to the future Park, while the Central Park is surrounded on all sides by the streets of a large city.

It is rare that a Park of such dimensions, even disregarding quality, can be found so close to the centre of a city as large as this. But the general accessibility of this Park from the whole water front of the city, is still more remarkable. The Field's Point peninsula, is as remarkable for the variety of its attractive features within, as for its commanding position on the Bay without. Nature has not only done here what it has cost immense sums in other places to do less effectively by the hand of man, but she has also lavishly furnished the materials for building roads and for improvement of the surface.

Providence, ever alive to her interests, voted in 1869 to construct public water works. The introduction of this life-giving element will invite manufacturing establishments to start within her boundaries, and with them a necessary large increase of population.

Narragansett Bay is one of the finest in the world, and the pleasure seekers who resort here during the heated term from our large cities, are amply repaid by the enjoyment of fine scenery, invigorating air and the opportunity to feast on the fish, oysters and clams that are found here in abundance. It is on this bay that clam bakes are an *institution*, and where they reach perfection. No student graduates at Brown without being competent to superintend a Rhode Island clam bake, and no citizen is considered a representative of this little State unless he is versed in these mysteries of which every Rhode Islander is justly proud. Three lines of steamers traverse this bay, connecting Providence with Fall River, Newport and New York daily. The watering places on this beautiful sheet of water are Field's Point, Ocean Cottage and Smith's Palace, 3 miles distant from the centre of the city, Cedar Grove and Maxfield's Resort, 5 miles, Mark Rock 9 miles and last but most attractive of all, the most beautiful and romantic spot on the bay, Rocky Point. Some $300,000 has been expended to make it one of the first summer resorts on the continent, and what nature has not done art has supplied.

Providence is advantageously situated for commerce; its harbor is safe and admits vessels of 900 tons. A heavy extensive trade was formerly carried on here with the East Indies and China, but since the introduction of manufacturing establishments it has been on the decline. The foreign arrivals for the year; ending December 31st, 1868, were 125 (21445 tons), of which 13 (1802 tons) were American vessels. The clearances for foreign ports during the same period were 114 (17167 tons, of which 12 (2684 tons) were

FRANKLIN FOUNDRY & MACHINE COMPANY,
(INCORPORATED 1836.)
MANUFACTURERS OF
COTTON
MACHINERY,
Water Wheels, Shafting, Gearing, &c.,
PROVIDENCE, R. I.
ALBERT BRIGGS, Agent. EDMUND THURBER, Treasurer.

American vessels. The coastwise arrivals for the same year were 5328. The principal articles of foreign merchandise now imported, are molasses, coal, salt, iron and lumber. The principal articles received coastwise, during the year, ending June 30th 1868, were 191,602 bales of cotton against 107,428 bales in 1864; 87,303 bales in 1863; 56,708 bales in 1862, and 159,878 bales in 1860. Some of the articles received coastwise for the year ending June 30th 1868, were 200,608 barrels of flour; 2,166,931 bushels of grain; 1365 tons of hay, and 438,545 tons of coal. The business of manufacturing print cloths alone, is very large. In 1863 the sales were 3,922,800 pieces, and in 1864 2,697,150; in 1865, 4,101,900; in 1867, 2,701,900; in 1868, 4,701,900. In January, 1861, the price of 64x64 was $4\frac{3}{8}$ cents; 1862, 9 cents; 1863, $14\frac{1}{4}$ cents; 1864, $16\frac{3}{4}$ cents; 1865, 27 cents; 1866, 20 cents; 1867, $12\frac{1}{2}$ cents; 1868, $6\frac{1}{4}$ cents; 1869, June 28, 9 cents.

There were Dec. 1st, 1868, 37 banks with a capital of $18,285,900. There are also 7 Savings banks with deposits amounting to $14,244,283.03. The city is divided into 9 wards and is governed by a Mayor, Board of Aldermen and Common Council. The registration of births and marriages and deaths in Providence is very complete. In 1830, two years before the incorporation, the population numbered 16,836; by the year 1850, its population had increased to 41,513 and by the last census, that of 1865, the number of the inhabitants is found to amount to 54,595, thus showing that the city has more than tripled its population in the last thirty-five years. Since the census of 1865 the number has been proportionately increased, and in 1868, received a large addition by the annexation of South Providence and Elmwood a part of the town of Cranston. So that the population at this time is estimated to be 70,000.

The number of males in the city in 1865, was 25,219, of whom 24,505 were white, and 714 colored; the number of females was 29,376, of whom 28,379 were white, and 997 colored. The excess of females over males was 4,157. Of the whole number of persons, 41,193 were born in the United States, and 13,402 in foreign countries; the number of American parentage, was 30,702, and of foreign parentage, 23,893.

The number of children attending school in 1865 was 9,889. The total number of population of 20 years of age and over, was 26,765, and of this number there were 2,239, who could neither read nor write.

The number of dwelling houses in 1865, was 6.773, and the whole number of families, 11,393.

The valuation of real estate in the city, in 1868, was $49,107,900, and valuation of personal property, $43,618,100. The total valuation of real estate and personal property was $92,726,000. The rate of taxation was $1.20 on each $100; the total amount being $1,112,712.

Roger Williams was the founder of this beautiful city. He was banished from the Massachusetts colony, for maintaining that all denominations of Christians were equally entitled to the protection of the civil magistrate; that the church of England was no true church, and that a patent from the king conveyed no title to the soil. In 1636, Mr. Williams, accompanied by William Harris, John Smith, Joshua Virrin, Thomas Angell, and Francis Wickes, landed on Slate Rock, and was welcomed by the Indians "What Cheer," and commenced a settlement of this beautiful city, calling it Providence, regarding his preservation as a favorable interposition of heaven. Roger Williams' spring, is near where he was buried. His remains have been exhumed to be placed in a monument to be erected to his memory. The progress of the city has been sure, and with slight exceptions uninterrupted, and for the past 30 years very rapid. Real Estate on the west side has increased more rapidly for the past 10 years than in any other part of the city. Surrounded by manufacturing villages, and at the head of one of the finest bays in the world, Providence takes precedence as the second city in New England, as to size, and the centre of manufacturies and the first according to its population in the United States, as to wealth, refinement, and educational advantages.

The following are accounts of many manufacturing establishments situated in this city, as well as some situated in the surrounding country, having offices located here. All establishments in this city have been applied to for information, but like many other establishments in other parts of New England, they declined giving any information whatever.

MANUFACTURERS.

The Albion Co. was incorporated in 1822, capital $200,000. The mill is located on the Blackstone river and is 200 x50 feet, 4 stories. They manufacture 28 to 40 inch print cloths and sheetings 56 to 88, running 400 looms and 20,000 spindles; consuming 30 bales of cotton per week. They have in use 6 boilers for heating and steaming purposes. A turbine water wheel furnishes the motive power, the fall here being 14 feet. Office 32 Canal street.

Franklin Foundry and Machine Company, situated on Charles street, was established in 1820, by S. Newell & Co., and incorporated in 1836, with a capital of $62,000. The buildings occupied are quite extensive, (mostly brick,) covering an area of about 6 acres. They employ 250 men, consume 1,000 tons of iron per annum, and manufacture cotton machinery, water wheels, shafting, gearing, &c. They use, to drive their machinery, a 60 horse pow-

THE PROVIDENCE TOOL CO.,

Providence, R. I.,

MANUFACTURERS OF

HEAVY HARDWARE

AND

SHIP CHANDLERY,

Including Nuts, Washers, Bolts, Chain Links, Pickaxes, Rings for factory cans, Plate Hinges, Threshing Machine Teeth, Hooks and Thimbles, Clinch Rings, Ship Scrapers, Marline Spikes, Connecting Shackles, Clews, Grommets, Galvanized Thimbles, and other sailmakers' articles. Police Handcuffs and Ankle Shackles, Nail and Brick Hammers, Machinists' tools and other machinery.—also,

PEABODY'S BREECH-LOADING FIRE ARMS,

For Infantry and Cavalry use, and for Sporting purposes.

These arms have received the highest approval from military and sporting men in various countries, and large quantities have been furnished to several foreign governments. Descriptive pamphlet, price list and testimonials furnished on application.

H. B. NEWHALL, Agent in New York: Office and Sample-Room, No. 205 Broadway.

JOHN B. ANTHONY. Treasurer.

er steam engine, made by the Corliss Steam Engine Co. of this city, and have three plain cylinder boilers. E. Thurber, Treasurer; Albert Briggs, Agent.

THE MOODUS CO. was incorporated in 1822, capital $50,000. The mill building is 40x100 feet, 4 stories high situated on the Moodus river. They manufacture 28 to 40 inch print cloths and sheetings 56 to 88, running 96 looms and 4000 spindles; consuming 6 bales of cotton per week.

Mill at Moodus, Ct.; office, 32 Canal street, in this city.

HARRIS LIME ROCK CO. was incorporated in June 1823, office 48 South Water street. Their works are located in Smithfield, 8 miles North of the city proper. Their capital stock consists of lime stone quarries, lime kilns, &c., which quarries formerly belonged to Joseph Harris of Smithfield, and his brother Stephen Harris of this city, and when incorporated, it was for convenience divided into 48 shares. This company have 20 employees and produce about 16,000 casks of lime per annum, doing business amounting to $40,000. D. C. Jenckes is Agent in this city for the company.

THE PROVIDENCE TOOL CO. was established in 1845, and incorporated May, 1847, and was the pioneer establishment in its peculiar line of manufactures. The business was commenced in a small way, and the articles made comprised nuts, washers, bolts, hooks and thimbles, &c., &c. In 1854 some additions were made to the works, and at the same time the Providence Forge and Nut Co. built a large establishment in North Providence, just over the city line. These two factories were each very complete, and both being engaged in the same business, it was soon determined to consolidate the two under the name of the original establishment. This consolidation was effected in 1856, and during the next three or four years the machinery of the old establishment was removed to the one in North Providence. Very extensive additions were made to this factory, and it soon became one of the largest in the country, and employed four or five hundred hands. There are fourteen (14) buildings in all belonging to this establishment, and used for manufacturing purposes. Most of these are large and tastefully built of brick; all new within a few years. The main building is 400 feet long, and 70 feet wide, a considerable portion of it being two stories high; an ell added to this building to increase the size of the Forge Shop, is 110 feet long, and the same width as the main building. Probably there are very few establishments anywhere fitted to do so great a variety of work as this.

The factory first built by this company, and which is located on Wickenden st., has been more that quadrupled in size during the last few years, and early in the late war was fitted up for an armory. About 80,000 Springfield muskets were manufactured, and then the production of Peabody breech-loading rifles was taken up. The company have now made many thousand of these, besides transforming a large number of muzzle-loading guns to breech-loaders. No armory in the country is better arranged for this business, or has more perfect machinery and appointments. Fully 500 men are sometimes employed in this establishment, and the "Peabody rifle" is known all over the world, as one of the best, if not *the* best fire arm yet produced. There are 13 buildings of various sizes, within the enclosure of the company, and most of them are built of brick and stone. The main building is 300 feet long by 40 feet wide, and four stories high. The blacksmiths' shop measures 100 feet by 50. Both factories are driven by Corliss's engines, each being about 150 horse power. The armory has five cylinder and two Harrison boilers, and the other factory has four flue boilers. The consumption of iron by these two establishments, exceeds 2,500 tons per annum, with a proportionate quantity of steel

WILLIAM A. HARRIS,

—MANUFACTURER OF—

Corliss Steam Engines,

BOILERS AND MACHINERY.

These Engines are built under the several patents granted GEORGE H. CORLISS.

In uniformity of speed under constant variations of load, they are excelled in not a single instance by any other engine.

In economy of fuel, they save from 30 to 50 per cent. over engines of other construction.

The peculiarity of style is original with the inventor, and the working parts are so arranged that they are easy of access, which is the case with no other engine.

The reputation of the Corliss engine is thoroughly established, and parties purchasing of me purchase the right to use.

PARK, CORNER PROMENADE STREET,

Providence, R. I.

and many other materials; in fact, steel for many porposes is made on the premises. It would require quite too long an article to give a full description of these works, and it is safe to say, it would greatly astonish those not familiar with their capacity to observe the variety and extent of the work to which they are adapted. The company organization comprises a President, board of Directors, and a Treasurer.

Col. Richard Borden, of Fall River, for many years connected with the multiplied interests of that flourishing city, is the President of this company, and Mr. John B. Anthony, is Treasurer.

The company have an office and sample-room in New York at No. 205 Broadway, and Mr. H. B. Newhall is their Agent there.

William A. Harris manufacturer of the Corliss steam engine, deserves from those connected with manufacturing interests more than an ordinary meed of praise for the energy he has displayed, and the untiring industry manifested in giving to the public this celebrated engine, practically perfect in its manufacture.

His motto is to "push things" and that success, which always attends ability, coupled with business enterprise, and sound judgment, has crowned his efforts, and placed him in the front rank with those eminent in mechanical knowledge and skill. Mr. Harris was connected with the Corliss Steam Engine Company as draughtsman, between eight and nine years, which gave him every facility to become acquainted with this engine, which joined with a natural mechanical turn of mind and close application has made him thoroughly conversant with every minute peculiarity of this improved engine.

He commenced the manufacture of the Corliss engine, on Eddy street, in the summer of '64, but was compelled by increase of business, and the necessity for more extended area to remove to his new works on Park street, corner Promenade. The main building is 152x50 feet, 1 story; another 80x32 with ell 32x16. The yards and buildings occupy 70,201 square feet, and are located in the immediate vicinity of the several railroad stations. A 30 horse Corliss engine, of his own manufacture and a 50 horse upright tubular boiler, manufactured by Corliss Steam Engine Company, furnish the power for the machinery.

One hundred persons are employed.

The manufacture of Corliss steam engines, from 12 horse power to 1000, and machinery for the manufacture of rubber goods are his specialties.

The well known excellent reputation of the Corliss engines, has stimulated competition with other builders of engines of different construction and pattern and led to interesting and exciting trials in which the merits of the contesting engines have been well educed.

We quote from the *Meriden Republican*, an interesting trial of a Corliss engine, built by William A. Harris of Providence, and an engine built by the Pacific Iron Works, of Bridgeport, Ct.:

"William A. Harris, of Providence, has recently completed and put into the works of the Meriden Britannia Company, West Meriden, Ct., a Corliss engine of 125 horse power. This engine is attached to the same shaft as an engine built by Pacific Iron Works, Bridgeport, Ct., but of the ordinary construction, and which has been in use four years. This was put in complete order, and the two engines, side by side, taking steam from the same boilers, and applying their power to the same shaft, were tested alternately recently.

"Mr. Lowe, of the Pacific Works, was present a portion of the time, and made a personal trial of both engines. He began what may be termed an informal trial with his own engine, commencing on the morning of the 24th of August.

GAS BURNERS.

MOONEY, ARNOLD & SHAW,

12 Page Street, Providence, R. I.,

—— Manufacturers of the ——

"RHODE ISLAND ARGAND BURNER,"

Patented December 17, 1867; January 14, 1868; August 25, 1868.

"Mill Burner," patented December 17, 1868. The best article yet invented, for Mills, Hotels, Streets, &c.

Also, **Brass Gas Burners, Drop Light Lockets and Shade Holders.**

☞For sale: Lava and Scotch Tips, Porcelain Shades, Argand Chimneys, "Atlantic" Flexible Tubing, &c.

At the expiration of Saturday, the 29th, his engine had expended 39,990 lbs. of coal, and rolled 1,248, 8 by 12 inch plates of $\frac{9}{16}$ inch thickness, down to the thickness required for the manufacture of Britannia goods. The next week commencing on Monday, the 31st, he made a trial of the Harris new engine. On the day ending September 5, the new engine, that is the Harris engine, had rolled 1,375 plates, and burnt 25,810 lbs. of coal. The new engine, it will be seen, had, therefore, consumed 14,180 lbs. of coal less than the Lowe engine, and yet had turned out 127 plates more than it had, although during the running of the Harris engine, the rolls were not in use for seven hours.

"The informal trial was pretty conclusive, and clearly demonstrated the superiority of the Corliss engine. Before Mr. Harris commenced *his* trial, he had one boiler that supplied steam for other purposes than motive power detached, so that the steam generated by said boiler was not used in connection with the engines. The fuel under the three remaining boilers was carefully weighed and accounted for. With Mr. Lowe's informal trial this boiler was not detached, which accounts for the excess in figures in the two previous weeks.

"On the 7th Mr. Harris began *his* trial of the two engines. He commenced with his own engine and at the end of the week had consumed 18,875 pounds of coal, and had rolled 1,532 plates. During four days of last week, Lowe's engine had consumed 21,635 lbs. of coal and had rolled 700 plates. The average consumption of coal per day upon the Harris engine is 3,146 lbs.; the average on the Lowe machine being 5,409 lbs., a saving by the former of 2,263 lbs., or 41 and $\frac{8}{10}$ per cent.

"On the last three days of the trial Mr. Harris ran his engine with two boilers only, instead of three. An attempt was made to run Lowe's engine with two boilers, but after working an hour and three-quarters, the engineer was compelled to attach the third boiler. The speed of the new engine is fifty-five revolutions per minute, and at one time, Friday, the 11th inst., an indicator diagram was taken, showing an increase of the load in four revolutions of 50 37-100 horse power without affecting the speed. On this day there were 330 plates turned out, being the largest number ever rolled at these works.

"From the facts and figures above quoted, the superiority of the Harris engine can be seen at a glance. The first great advantage is the vast saving of fuel, and the second, the increased amount of work it turns out."

Mr. Harris gives his individual attention to the construction of this engine, the quality of its material and of workmanship in all its parts and engines of his manufacture have no superior in the market.

The Providence Iron Co. was incorporated in May, 1845, and put in operation as a rolling mill for making railroad iron, screw rods, wrought nails, &c. Not proving successful the works were suffered to lie still till 1854, at which time they passed to new proprietors. The management at this time was entirely changed, and Mr. Nahum Stetson became President, and O. A. Washburn, Jr., Treasurer. The company recommenced operations in June, 1854, with a capital of $200,000; employing 225 men.

The works are located on India street, and directly on the wharf where the largest class of vessels can find ample depth of water. The buildings extend on India street 600 feet; and thence to the river 200 feet, and are puddling mill 100x85; rolling mill, 150x130; nail factory, 80x85; packing room, 30x80; blacksmiths' shop, 25x26; store house, 80x27; store house, 80x90. These works are driven by 3 engines, 1 Fairbanks, Sickle's cut-off, 200 horse power; 1 Corliss, 150 horse power; 1 Merrick & Son's, Philadelphia, 150 horse power. There are 5 double puddling furnaces, 1 single, 7 heating furnaces, 5 trains rods, 1 Winslow squeezer, 66 nail machines. Coal used per year, 10,000 tons; iron per year, 4,000 tons pig, and 2,500 tons scrap. Nails made per year, 80,000 casks. Wire rods per year, 1,800 tons. Boilers used, 3 egg shaped, 2 cylinder, 3 flue, and 1 tubular.

Mooney Arnold & Shaw, 12 Page street, Providence, manufacturers of the "Rhode Island Argand Burner," patented January 14, 1868; December 17, 1867 and August 25, 1868. "Mill Burner," patented December 17, 1867, also brass burners, drop lights, lockets, shade holders, &c. Building 25x90 feet, 1 story, part of 2d; employ 16 hands; use 9 presses, 11 lathes and other tools. Make 75 to 90 gross per week; engine horizontal, made by F. Fuller, 8 horse power, 1 boiler, upright, tubular.

The Providence Steam Engine Works is one of the oldest establishments of the kind in New England, the company having commenced the manufacture of steam machinery in 1821. In 1845, the works were entirely destroyed by fire, and were immediately re-built. During the war they were greatly enlarged, and new and expensive machinery added, for the purpose of building large marine engines for the government.

The works are favorably located on the river on which they have a part of about three hundred feet. On their wharf is a derrick capable of lifting one hundred tons; the buildings are a machine shop, 230 feet long, 56 feet wide, and three stories high, with an ell 130 feet long, 56 feet wide and 2 stories high. A boiler shop 180 feet long and 40 feet wide, and a smith shop 70 feet by 60 feet. All are supplied with first class tools for doing heavy work.

This company have built a large number of stationary

PROVIDENCE STEAM ENGINE CO.

MANUFACTURERS OF

STATIONARY, MARINE AND PORTABLE

Engines and Boilers,

Riveting Machines, Shafting, Mill Gearing,

AND

Burdict's Patent Bolt and Nut Forging Machine.

373 to 399 South Main Street,

PROVIDENCE, R. I.

HENRY W. GARDNER, Agent and Treasurer. T. W. PHILLIPS, Secretary.

steam engines which are in operation in nearly every state in the Union. During the war they built for the government, two large engines for side wheel steamers, and two large screw engines for sloops of war. One of the latter was erected in the United States Steamer "Contoocook", which is now the flag-ship of the North Atlantic Squadron.

The steam riveter made by this company is the most perfect machine of the kind, ever built, it is operated by two steam cyliuders, one of which forces the plates together, and holds them, while the other drives the rivet.

The company also manufacture stationary and marine boilers of all descriptions and sizes, tanks and gasholders, and have great facilities for the repair of marine as well as stationary engines.

The company have been engaged in building a large number of Burdict's patent bolt and nut forging machines, which forge bolts and nuts from $\frac{3}{4}''$ to $2''$ diameter, with wonderful rapidity and perfection.

The company employ 250 men, and consume annually about 1500 tons iron. The present officers are Henry W. Gardner, Agent and Treasurer; T. W. Phillips, Secretary.

HOPE IRON WORKS. In 1857, Joseph P. Manton commenced the machine and foundry business with others associated with him, with a capital of $20,000 and employing only about 10 hands, and incorporated under the name of Hope Iron Foundry, 185 Eddy street.

The enterprise and energy of those directing the affairs of the company, have increased the capital employed, to $175,000 from the profits of the business, besides the cash dividends paid out, and the Works now cover about 3 acres of ground, with machine and erecting shop, blacksmith's shop, wood shop, foundry, pattern houses, &c., &c. The different kinds of work they have given their attention to, they have made their study, instead of being contented to build as others did, to improve, so that their work became specialties in their class, and their machines superior to any of the same kind manufactured by others. Their Babcock & Wilcox engine is claimed by them to be superior to any other manufactured.

They claim that their Babcock & Wilcox non-Explosive Boiler, overcomes all the defects that have destroyed the value of other sectional and non-explosive boilers. Their "drop press" has superceded many others in the armories of the United States, and has been exteusively introduced in all the various manufactories of metal; where work is struck up. Their "drying machine" overcomes all the troubles heretofore experienced from condensed water, and with one-half the steam and less power. Their machines will dry properly, one-third more cloth than any other machine. In calico printing machines, their improvement doubles the quantity on tight fitting patterns, without making seconds. Their work is varied, and the above description will convey an idea of the skill they have displayed in improving their special machines, and they have as a matter of principle, carried the same idea into all the articles they manufacture, which are numerous and cover the wants of the community, such as shafting, gearing, bleaching, printing and rubber machinery; gun tools, ship windlasses, screw machines, special tools and machines, &c., &c. So that from the variety and novelty of their works, the most proper name for the concern, would truly be "Novelty Works," where a person wanting to produce a result, without knowing how to do it, can find the skill and facilities for producing the desired result. The officers of the company, are George Chatterton, President, Joseph P. Manton, Agent and Treasurer, Frank S. Manton, Secretary. See advertisement inside front cover.

WILLIAM H. ALMY,

Manufacturer of

CARPET WARPS,

Cotton Twine, Candle Wick and Cotton Batts,

BED COMFORTERS AND COTTON MATTRESSES.

36 BACON STREET, - - PROVIDENCE, R. I.

American Broom Co., factory No. 3 Jenkins avenue. Office, 33 South Water street, commenced business in May, 1866, in one room 22x38, employing one man and a boy. They now occupy a brick building 40x45, three stories high. The basement, first floor and attic, are for storage of stock; second and third, for preparing and for manufacturing. Employ 12 to 15 hands, in the working season, and make about 50 tons of broom corn into brooms and brushes of a very superior quality, orders reaching them from every town in the State, from Worcester, Boston and the adjacent towns, and as far east as Lowell and Portland.

William H. Almy, manufacturer of carpet warp, candle wick, cotton twine and cotton batts, No. 36 Bacon street, is the largest manufacturer of cotton batting in the State. His weekly production being over 15,000 lbs., and in six different qualities. He is also a large manufacturer of cotton twine, carpet warp, &c. The above named goods are made by him at four different mills, as follows: Chapel mill, Johnston, employing 20 hands, and producing 3,000 lbs. carpet warp per week. Eagle mill, Johnston, employing 20 hands and producing 3,000 lbs. cotton twine, and 3,000 lbs. batting each, per week. Rising Sun mill, Providence, employing 16 hands, and producing 7,000 lbs. batting per week. Whipple mill, North Providence, employing 15 hands, and producing 5000 lbs. batting per week.

Rhode Island Locomotive Works, established as a manufactory of locomotives, October, 1866. Employ about 300 hands; buildings cover some 3½ acres of land; consume 2,100 tons material each year. Officers, W. S. Slater, President, Earl P. Mason, Treasurer, B. W. Healey, Superintendent, A. S. Carleton, Secretary. Produce about 5 locomotives per month.

The Paint Factory of Messrs. Oliver Johnson & Co., is located at Nos. 13 and 15 Exchange street. The factory and warehouse are in the same building and occupy 5 floors, each 40 feet square. All leads ground by them are run through a 28 inch double French burr stone mill, which insures their fineness and freedom from grit. The paint is mixed in the upper story, by power, and falls directly into the hopper of the upper mill in the story below. After passing through this mill, it runs into its mate, a little below it, and is there ground again into kegs for sale. It is therefore one continuous process, without any handling from the time the lead and oil are put into the mixer, until it is in the kegs. This mill is capable of grinding from one to three tons a day, according to the kind of lead, some grades feeding and grinding much faster than others. Besides these lead mills there are several smaller mills for grinding colors—the turning out of superior colors for painters' use being a leading feature in their business.

As may be supposed, in a building of so many stories and with so much business done in the upper part, much heavy hoisting is necessary, which is done by a steam elevator, extending from the basement floor to the roof. In this way 2,500 lbs. are taken from the cellar to the attic, in a little more than a minute. The expense of this elevator was about $1,200, but at this price it is deemed a good investment, and is really indispensable. The power required for hoisting, mixing and grinding, is supplied by a 15 horse power engine and a Brayton steam generator, by which the steam is used as fast as it is generated, and all danger from explosion is thereby avoided.

Messrs. O. J. & Co. have found by an experience of 35 years, that the only sure way to get reliable goods is to go to first hands. They are, therefore, importing their foreign articles themselves, and by buying only of the manufacturers, are enabled, not only to sell as low, if not lower than others, but to guarantee the quality of their goods.

J. A. Brown & Co., manufacturers of Geo. W. Ladd's patent stiffened or "filled" gold watch cases—occupy the 2d floor in Mathewson & Allen's building, No. 58 Eddy street. Their patent is upon a method or manner of making, which allows of the cases being made of one half or one third the quantity of gold used in a solid case, while the other one half or two thirds (the stiffening or "filling") is of nickel composition to which the gold is sweated or welded, thus making the case equally as stout and serviceable as a solid gold one at one half or one third the cost. Two qualities of these cases are made, designated as first-quality, or one third, and extra quality or one-half, both beautifully engraved and engine turned, and fully equal for appearance and wear, to solid gold cases, and indeed cannot be told from them by good judges.

Mr. Brown commenced in the business of manufacturing lockets in 1858, and has continued in the same until the steady and increasing reputation, popularity and demand for the Patent Watch Case, invented by Mr. Ladd some two years or more since, has nearly or quite driven them to discontinue the manufacture of lockets. Very powerful, as well as very delicate machines, many of which are the invention of Mr. Ladd, are used in the manufacture of these cases, by means of which large quantities of "parts" are rapidly turned out, largely taking the place of the hand labor employed in the old methods of manufacture. The concern at present employ twenty men, but expect soon to add to their working force. Their office and salesroom is at No. 11 Maiden Lane, New York.

Barstow Stove Co., A. C. Barstow, the senior partner, has been engaged in the manufacture of stoves about 32 years. The present location of the business was taken

24 years since. The works now occupy 2½ acres of ground and are very complete in all their appointments. The two moulding rooms have 30,000 feet of floor or about three-fourths of an acre. Besides this they have a 2 story building, containing about 16,000 feet of floor, for the storage of their flasks, now amounting to about 9,000. Besides this their large brick buildings afford ample room for mounting stoves, with storage for 4,000 to 5,000 stoves, storage for their large variety of patterns, and other articles used in the different processes of manufacture. Capacity for manufacturing 12 tons of stoves per day, with a force of about 200 men. More than 50 different kinds of stoves, furnaces and ranges are manufactured, and of each kind, there are from two to six different sizes. The patterns are all made by themselves and under their own patents. They neither buy or sell patterns or patent rights.

SNOW & LEWIS (successors of Walter B. Snow who was the successor of A. F. Adie.) Commenced business as a firm in 1862, both members of the present firm having been for a number of years previous, connected with their predecessors in the same location.

They import largely all kinds of drugs and chemicals direct from England and the continent, and manufacture all kinds of dyewood, dyewood liquors, and extracts. Their manufactories cover about one acre of ground, using a steam engine Corliss patent of about 200 horse power, and a water power equal to about 60 horse. They employ about 40 hands, and one of their mills has been employed constantly night and day through the entire year. They have recently added to their works a 3 story wooden building 105x40 feet on Charles street, run by 2 wheels, one breast and one turbine 40 horse power combined, under a 9 feet fall.

HENRY G. WILLIAMS occupies a two story wooden building 40x50 feet, located on Bourbon street, between Broad and Greenwich, for the manufacture of Martin's Yankee Blacking, liquid and chemical spanish blueing and spice cans. Commenced business in 1866, at 241 High street. Moved to the present location July 1, 1868. Employs 8 hands, has a capacity for bottling over 2000 bottles per day, and put up about 20 gross of blacking.

LEONARD KINGSLEY occupies a 3 story wooden building, 40x50, 585 High street, for the manufacture of cigars. He commenced business in 1859. Employs 35 persons, turning out about 100,000 cigars per month.

PROVIDENCE WIRE WORKS. H. H. Fenner, Proprietor, occupies two rooms one 25x20 feet, the other 30x20 feet, at 170 Westminster street, for the manufacture of all kinds of wire goods. He commenced business in 1842. Employs 6 persons. He also makes a specialty of manufacturing railroad car baskets.

CURRY, RICHARDS & ANTHONY occupy a six story brick building 40x80, located at 7 and 9 Fulton street, for the manufacture of furniture, also occupy a four story brick building, French roof, 50x100 feet, for office and salerooms 118 Westminster street. They employ 40 persons and do a business amounting to $200,000 per annum.

W. HUNTON commenced the manufacture of cigars as successor to W. J. Hunton, his father, in 1867. His father established the same in 1848. The building is of wood 25x100 feet, 2 Courtland street. 100,000 cigars are made here per month.

A. B. CURRY & SONS occupy three rooms 40x90 each in the 4 story brick building on Summer street, near Pine, for the manufacture of upholstery goods, springs, &c. They commenced business in 1858. Employing 30 persons; use about 10 tons of iron wire per week. A 100 horse power engine built by Woodruff & Beach of Hartford, furnishes the power for the works. Business amounts to $100,000 per annum.

JOHN T. MAURAN occupies a room 40x90 feet, in 4th story of brick building, 30 Page street, for the manufacture of gold and plated jewelry. Employs 25 persons; commencing business in 1850.

WM. RALSTON occupies 5 rooms 50 x 22 each, in second story of wooden building 35 Dyer street, for the manufacture of paper cop tubes. Mr. R. commenced business in 1856, and now employs 10 persons, doing a business of about $8,600 per annum.

JOSHUA HUNT occupies 2 rooms on third floor, 257 Westminster street; one 30 x 60, the other 50 x 50; for the manufacture of cigars of the finest grades. He employs 25 persons, making 100,000 monthly, and also has a store at 116 Westminster street.

J. W. RICHARDSON & CO. occupy a room 35x100, in brick building 51 Friendship street, for the manufacture of emblems for societies and all kinds of gold work; commenced business in 1862, employ 30 persons. The firm is J. W. Richardson and H. B. Gardiner.

WIGHTMAN & HOUGH, manufacturers of gold and plated jewelry, occupy a room 35 x 45, in fourth story of brick building at 51 Friendship street. They commenced business in 1863, employing 12 persons.

CLEVELAND & BROTHERS occupy a 2 story brick building, 30x40, located at No. 13 Mill street, for the manufacture of furniture, cocoa dippers, &c. They also occupy 4 floors 40 x80, in brick building, at 93 and 95 N. Main street, as a store and salesroom. They commenced business in 1840, and now employ 30 hands, and do a business amounting to $85,000 per annum.

EMERSON TOWER & SON occupy lower floor in wooden building 40 x 75, located at Page, corner Friendship street, for the manufacture of fire escapes, balconies, wrought and cast iron fences, &c. They commenced business in 1866, employing 6 persons.

J. F. HOPKINSON occupies a room 30 x 80, in brick building, at 30 Page street, for the manufacture of electro-plated jewelry; commenced business in 1861; employing 30 persons.

PAYTON & HAWKINS occupy a 2½ story wooden building, 25x50, located at 16 Page street, for the manufacture of gold jewelry. Commenced business in 1843; employing 20 persons. They use an 8 horse power upright steam engine, built by the Fuller Iron Works.

PROVIDENCE SPRING AND AXLE CO. occupy a 3 story brick building, at Point, corner Richmond street, 40 x 30, with a blacksmith shop attached, 40 x 30. They commenced business January, 1866; employ 15 persons, use 8 turning lathes, 1 trip hammer, 1 rolling machine for welding springs, and 3 punchers. A. Shackford, Agent.

OLNEY READ occupies lower floor of brick building 8 and 10 Richmond street, for the manufacture of first class carriages. He commenced business in 1832; employing twelve persons. Also, has one room in second story, 40 x 60, for wood work, and another 120x30, for trimming. He does a business amounting to $20,000 per annum.

ROBERT HAY occupies a room in third story of a brick building 24x75 feet, for the manufacture of paper cop tubes. He commenced business in 1866; employs 5 persons, using about 3 tons of paper per annum. This manufactory is located at 110 Canal street.

G. S. HALL occupies 3 rooms in the 2 story brick building, Dorrance, corner Washington, one room 20x50, another 40x50, for the manufacture of French and American candy. Commenced business July 7th, 1868. Employs 8 persons, using 1½ barrels of sugar per day, making about 675 lbs. of candy.

W. E. BARRETT & COMPANY,

— PROPRIETORS OF THE —

Rhode Island Agricultural Warehouse, & Seed Store,

44 CANAL STREET, PROVIDENCE.

Manufacturers of and dealers in all kinds of

FARMING TOOLS AND SEEDS.

A. FULLER, G. W. WILLIAMS, GEORGE F. FULLER, W. E. BARRETT.

— SOLE MANUFACTURERS OF —

MEAD'S PATENT CONICAL PLOWS, and SHARES' PATENT HORSE HOES.

PROVIDENCE STEAM PAINT WORKS occupy the lower floor 25x50 of brick building, 63 South Main street, for the manufacture of white lead, zinc, &c., &c. They commenced business in 1865. They run one of the American safety steam engines 15 horse power, George E. Brayton, patentee, built by the Choate Manufacturing Co., Exeter, N. H. The Providence Steam Paint Works firm is composed of H. W. Parker and Joshua Nye.

CHENEY & PERRY occupy a 3 story wooden building 30x70 with an ell 22x32, Lockwood, corner Hayward street, for the manufacture of straw, felt and velvet goods. They commenced business in 1867. Employ during the busy season about 450 hands and turn out from 1,200 to 1,500 hats per day. They use a 10 horse tubular boiler for heating purposes, built by the Fuller Iron Works of this city. E. S. Cheney and George P. Perry, constitute the firm.

VALLEY WORSTED MILL, Carpenter & Cross, proprietors, occupy 1 brick building 65x200, 4 stories; 1 wooden building used as a wareroom 60x60, 3 stories, boiler room 40x30, brick dye house 80x35, wool room and picker room 80x40, 2 stories. They commenced business Jan. 1868. Employ 575 persons for the manufacture of worsted braid and fancy woolen goods. They use about 800 braiding machines and work up 2,000 lbs. of worsted wool per day. The power is furnished by two of Noble T. Greene's engines, 120 horse power each. Pay roll per month $11,500. The company is Joseph Carpenter and William J. Cross.

This company use 16 shuttle looms and 25 knitting looms, and the whole works cover about 95,000 square feet.

MOORE & DROWNE occupy a 2½ story wooden building, Calvin, corner Central street, for the manufacture of silver plated forks, and spoons, and jewelry. Commenced business in July, 1867. Use a 12 horse power engine, and employs 30 hands.

N. P. MAKER occupies a room in the 2d, story of wooden building, Calvin, corner Central street, for the manufacture of jewelers tools, dies, &c. He commenced business in June, 1868.

RHODE ISLAND BLEACH & DYE WORKS George J. Adams, Agent, office 27 Custom House street. The works are located at 311 Eddy street, and employ about 100 persons bleaching cotton goods. This Company was established in 1815.

A. BURGESS & SON, belting, pickers, cop tubes and hose manufacturers, No. 479 North Main st.; established 1835. They now occupy a wooden building, three stories 160x40; motive power furnished by 30 horse power engine, built by Hope Iron Works, of this city, Babcock & Wilcox's patent; employ 40 persons. Pay roll, $1,200 per month.

W. E. BARRETT & CO. occupy a 4 story brick building, 100x100 feet, at 44 Canal street, for an office and warehouse. Their manufactory is at 12 Burgess street, 50x200, 2 stories. They are the largest dealers and agricultural implement manufacturers in the State. They also deal largely in seeds. They commenced business in 1848; employ 25 persons, and run one of Bellows & Whitcomb's steam engines, 20 horse power.

A. & C. W. HOLBROOK, manufacturers of belts and loom pickers, No. 271 North Main st. This manufactory was established in 1842. They occupy 2 buildings, each 4 stories in height, embracing 10,600 square feet. They employ about 30 hands, to which are paid $1,400 per month, and do about $100,000 worth of business per year. Their trade extends throughout the Union.

OIL FACTORY, for the manufacture of sperm oil and sperm candles; established at 47 South Water street, Providence, R. I., in the year 1833. Since which period, the manufacture of sperm, whale, lard, palm and paraffine oils is at same place. The business is carried on by James M. Earle. Building is 40 by 80 feet, 3 stories and basement. Try house 25 by 40 feet.

When in full operation, 600,000 lbs. of lard is required annually, to be used in the manufacture of lard oil. About 4,000 bbls. of sperm, whale, or paraffine oils can be manufactured annually at these works. The present proprietor has pursued this business for a period of 35 years at the factory now occupied by him.

CITY WOOLEN CO., occupy 2 floors 30x75 each in brick building, Summer, corner Pine, for the manufacture of woolen and fancy cloakings. Commenced business July, 1867. Employ 50 hands, using 4 sets of woolen machinery, run by one of Woodruff & Beach's engine of Hartford, 80 horse power. They use about 800 pounds of wool daily, making 80,000 yards of cloth per year. Arthur Fieldhouse, Superintendent; Chapin & Downes, Agents.

AMERICAN ENAMEL CO. occupy a 2 story brick building 30x200, at 9 Warren street, for the enameling of all kinds of wood and metal work. They commenced business in 1866; employ 60 hands, and use a 6 horse power engine. Their specialty at this time is enamelling steel combs, of which they have enamelled 1,000,000 during the past year. Amos W. Snow, Treasurer; C. L. Robertson, Secretary and General Agent.

I. I. ENGLAND occupies the third floor of wooden building 43 Exchange place, for the manufacture of leather belts, sheep skins, lace and picker leather, &c. He commenced business in 1865; employs 6 persons. His manufactory is 25x110 feet, doing a business of about $50,000 per annum.

JOHN L. CALDER,

Coppersmith & Plumber,

NO. 61 DORRANCE STREET,

PROVIDENCE, R. I.

☞All kinds of Copper Work made to order and with despatch. Plumbing Materials of the best quality kept constantly on hand, and put up in the best possible manner.

☞ Particular attention paid to Plumbing Houses in the country.☜

Philip Felker occupies a 2 story wooden building 30 x 30, at 246 High street, for the manufacture of brushes; commenced business in April, 1869; employs 6 persons.

Gurdon E. Lyman, manufacturer of refined patent non-explosive oil and fluid, occupies a 2 story building 30x40 ft., at 210 Washington street; employs 3 persons, commencing business in 1862.

John McCausland, manufacturer of paper cop tubes, occupies 4th floor of brick building, 3 South Water street, 45x 60; commenced business in 1866, employing 8 persons, and using 100 lbs. paper per day.

John Bligh, brewer of ales and porter, occupies a 4 story brick building 43x70 feet, located at Jackson, corner Fountain street. He commenced business in 1866. Capital, $75,000; employs 10 persons, and has a capacity for making 125 barrels per day. Uses one of Brayton's patent engines and 2 boilers, 20 horse power. He has a retail store at 48, 50 and 52 Orange street.

Noyes Bros. occupy a 2 story building 40x40, 33 and 35 Richmond street, for the manufacture of crystalized pop corn cakes. They commenced business in 1865, and employ 6 persons, making about 50,000 cakes per day and 8 or 10 barrels of sugared pop corn. They have secured the copyright for the Atlantic Cable sugared pop corn, and for the Crystalized pop corn and cakes.

"The undersigned have examined and tested the popped corn shown by Mr. C. H. Noyes, 'The Pop-Corn Man,' and found the same of excellent quality and prepared in a style superior to anything of the kind that has ever come under our observation. We regret that the rules of this Association will not admit of the award of a premium for this excellent article of Confectionery.—T. A. Clark, James R. Lamb, Wm. P. Whitter, Jr., *Committee of New London County Fair, Norwich, Conn.*, 1867."

Steere & Crooker, manufacturers of assorted jewelry, occupy a room 30x130 in 4th story of 58 Eddy street. They commenced business in 1856. Employ 40 persons. F. A. Steere and J. W. Crooker, constitute the firm.

S. C. Fish, manufacturer of gold plate and cheap jewelry, occupies rooms at No. 47 Clifford street. He employs 12 persons.

Knight, Cutler & Co., manufacturers of flour, occupy a mill 240½x58½, 6, 7 and 8 stories high, located at 18 Salsin street. They employ 100 men. Have 18 run of stone, and have a capacity for grinding 500 bbls. of flour and 2,000 lbs. of corn per day. A 375 horse power engine made by Corliss, drives the machinery.

Rose & Walker, tanners and manufacturers of whole hide, belt, harness and grain leather, calf, sheep and lamb skins, &c., occupy a 3½ story building 32x100, located near the Stonington Railroad repair shop. They commenced business in 1860. Employ about 22 persons; use a 12 horse power engine to drive their works, and do a business amounting to $120,000 per annum. Salesroom 52 Exchange Place.

Nickel & Morlock occupy 2 floors in wooden building 102, 104 and 106 Dorrance street 30x50 feet, for the manufacture of library and office furniture. They commenced business in 1864. Employ 8 persons, use 2 circulars, 1 jig saw, and 2 turning lathes. The power is furnished from engine in adjacent building.

John L. Calder, manufacturer of all kinds of copper work, such as boilers, kettles, &c., occupies a three story building 26x18, 61 Dorrance street. He commenced business in 1855, employing 9 persons and works up about 6 tons of copper annually and 20 tons of lead.

Patent Harness Co., occupy a 3 story wooden building, 32x80, at 31 Jenkins street, for the manufacture of Winsor's patent machine loop harness, for cotton and flax looms, they claim that the machines used by them, furnish more even and uniform articles, every way better than can possibly be done by hand, also, paper cop tubes. This company commenced business in 1853. They use a 3 horse power engine, which has been in operation for the last 40 years, and was built by Fred. Fuller. The officers of the company are W. W. Fletcher, Treasurer, Joseph S. Winsor, Agent.

T. Curtis & Company are manufacturers of all kinds of brushes, at 9 Peck street. They commeuced the business in 1825. Employ 8 persons, and do a business amounting to about $20,000 per annum.

Frank G. Dow manufacturer of sails and awnings, occupies the 3d story 131 South Water street. He commenced business in February, 1866, employing on an average 5 men.

Builders' Iron Foundry occupy a building 40 x 200, on Codding street, for the manufacture of stoves, furnaces, machinery castings and ornamental iron work. This company commenced business in 1851; employing 125 persons, using a 40 horse power engine. Z. Chaffee is Agent for the company; Noble T. Greene, Superintendent.

James Mountney & Bro. occupy a room 25x40, in second story of brick buildiug, Summer, near Pine streets, for the manufacture of silk and cotton head nets. Commenced business in 1866; employ 6 persons.

R. W. Bush occupies a 2 story wooden building 40 x 60, with an L 20x50, 2 stories, 25 Charles street, for wool pulling and the manufacture of sheep skins. He commenced business about 1827; employs, on an average, 12 persons. Office and salesroom, 19 Dorrance street.

J. H. Thatcher, manufacturer of files and rasps, occupies a room 30x50, at 36 Exchange place. He commenced business in 1864, and employs 5 persons.

H. N. Fenner & Co., machinery manufacturers, commenced business in 1865, making a specialty of planers and planer centers, located at 178 and 180 Eddy street, in the first story of a building—100x47, wood. The machines used in the construction of their machinery are 4 planers, 10 engine lathes and 1 Browne & Sharpe milling machine. Motive power furnished by engine adjacent; employees 25, turning out about 15 planers, &c., per year.

J. A. Gowdey & Son, reed and harness manufacturers, 22 Clifford, in 2d story of a new brick building, 90x40; also a branch manufactory in Fall River, Mass.; was established in 1834 by J. A. Gowdey, who is now deceased, the son continuing the business under the above name, who has been connected with the firm since 1840, and now sole owner and manager of the establishment, which is the largest of the kind in the country, and supplying the largest mills. They use 10 reed machines and 12 polishing frames and 4 pair of rollers, and employ 16 persons.

City Iron Foundry, Smith & Carpenter, Proprietors, 165 Dyer street; commenced business in 1865, occupying a one story wooden building, 100x80 feet; employ 20 persons; producing 3,000 lbs. castings per day, for steam engines, fences, and machinery. Amount of business done per year, $35,000. Motive power obtained from engine adjacent.

The only manufactory of organs in the State of Rhode Island, is that of Baker & Randall, located at 84 Orange street. Office 70 Weybosset. The present partnership was formed in 1866, and now occupy a part of 5 story brick building 60x45; employing 17 persons. The motive power is furnished by a 10 horse power engine manufactured at Watertown, N. Y. A style of organs peculiar to this firm is made in book case form, patented by them. Another improvement in their construction is putting 3 sets of reeds, 7 stops under a six inch key and one valve. This style is manufactured by no others in the United States. They use in the construction of these instruments 10,000 feet black walnut and 4,000 of fine, turning out about 300 yearly.

Angell, Holden & Co., jewelry manufactnrers, commenced business 1865. They occupy rooms at 30 Potter street, manufactnring gold rings exclusively, employing 12 persons and doing a business amounting to $20,000 per year. Use 1 drop press, 2 cutting presses, 2 turning lathes, 3 pair rolls and 1 draw board. The motive power is furnished by engine adjacent.

The first file manufactory in the United States was that conducted by William Bullas, who commenced business in 1830, having learned his trade in Sheffield, England. His son Samuel P. Bullas continues in the same occupation at the corner of Eddy and Friendship streets. Employing 9 persons.

Thomas W. Sprague, 95 and 97 Dorrance street, commenced the coffee and spice business in 1852. He now occupies 2 floors of a brick building 70x22 feet each, also, a roasting room adjoining, 30x60. Uses 3 coffee grinding and 2 spice grinding machines. Employs 7 persons and doing a business amounting to $50,000 per year.

The first manufacturer of coffins for the trade in New England, was G. T. Swarts, who commenced business in 1836, and now occupies a 4 story brick building, 48x60 employing 8 persons, using 20,000 feet of lumber per year, and furnishing 1000 coffins.

Daniel R. Child, 120 Dorrance street, gold and plated jewelry. Commenced business 1865, on 3d floor brick building 30x70. Employs 35 persons, using 10 lathes, 1 pair rolls, 4 presses. Doing a business of about $45,000 per year.

Wm. H. Shaw & Bro. manufactnrers of belt hooks and ring travelers, 131 Dorrance street. Commenced business 1868, Jan. 1st.

C. G. Cahoone, successor to Cahoone & Griswold, diamond jewelers, occupies rooms on 2d floor of brick building No. 129 Westminster street. Employs 7 persons, doing a business of $40,000 per year.

R. D. Horton, manufacturer of plated jewelry, in the 3d story of wooden building, 131 Dorrance street, to which place he removed in Aug., 1868. Commenced business in 1865; uses 1 drop press, 1 pair roll cutters, 6 lathes; employing 14 persons, and doing a business amounting to $15,000 per year.

Geo. W. Smith, machinist and manufacturer of jewelers' tools, Orange, corner Friendship streets; commenced business in 1856; occupies room on first floor of wooden building 25x30; uses 1 planing machine, 6 lathes, 1 grinding machine; employs 1 person. Motive power furnished by engine adjacent.

Archibald Mitchell occupies the fourth and fifth stories of brick building 60x40, 84 Orange street. Commenced the manufacture of hoop skirts, tape, braid and wire goods in 1861; employs 35 persons, who finish about 240 skirts per day. The machines used in their manufactnre are 10 Knowles' patent fancy looms, 40 braiders, 2 spoolers, 1 doubler, and 2 warpers. Most of the skirts are sold at his retail stores, 194 Essex street, Lawrence, Mass., and 158 Westminster street, Providence, R. I.

Wm. Jackson, thread manufacturer, 101 Orange street, commenced business in 1836; occupies 3 floors 40 x 34, uses 10 spoolers, employs 16 persons, and manufacture 7,000 doz. spools of thread per month. Motive power furnished by engine adjacent.

G. W. Miller, safe manufacturer, at 105 Orange street. Office, 40 Weybosset street. Occupies a 2 story wooden building 60x25; employs 12 persons. The manufacture of safes by him was commenced in 1850. Motive power furnished by eogine adjacent.

The Patent Pencil Co., 14 and 16 Friendship street, are successors to the American Pen Holder and Pencil Co. Incorporated 1865. Capital $150,000. Geo. P. Tew, President; George B. Holmes, Treasurer; Wm. Coe Peckham, Secretary and Agent. Occupy a brick building 90x36, seven stories high. Employs 250, when the works are in full operation.

Wm. Smith & Co., silver and gold jewelry manufactnrers, 118 Dorrance street, succeeded Wm. Smith & Bro., who commenced this business in 1860. The present firm was formed in 1864. Occupy one floor in brick building, 30x90. Motive power from engine adjacent. Use 7 presses, 4 pairs rolls, 1 doz. lathes. Employ 30 persons, and do a business amounting to $50,000 per year.

Baker & Mumford, 120 Dorrance, street, manufacture plated, composite shell and gold jewelery. Commenced business April 1, 1868. Occupy one floor in brick building, 100x30. Use 4 pair rolls, 2 drop presses, 1 engine lathe, 15 lathes, 3 screw presses. Employ 30 persons, motive power hired. Both members of this firm have carried on the jewelery business for some 15 years separately.

J. Putney commenced the manufacture of chandeliers in 1858. He was succeeded by George Hutchins, he being succeeded by Henry S. Olney, who sold out to the present owner, L. Lapham, who does business under the name of "Providence Chandelier Co.," located at 19 Clifford street, in a 1 story wooden building 90x30; uses 9 lathes. Employs 16 hands, and does a business amounting to $20,000 per year.

William H. Vaughan, proprietor City mills 116 Dorrance street, manufactures and prepares mustard, spices, and coffees. Commenced business in 1865. Occupies a first floor 100x30, second floor 50x30. Uses 3 burrstone mills, 1 iron mill, 1 coffee roaster, and mortars. Motive power furnished. Employs 8 persons. Roast 1000 pounds per day, and does a business amounting to about $100,000 per year.

Union Eyelet Co., Eddy, corner Friendship street, capital $300,000. David Heaton, President. This company occupy a 3 story wooden building 50x100. Employ 16 persons, who turn out 3,000,000 eyelets per day. Use 21 patent machines for their manufacture, besides 3 lathes and 1 planer. These eyelets are used for hoop shirts, shoes, &c., &c. The company consume about half ton of brass per day.

Mason & Presbrey, 15 Clifford street, electro plated jewelry, occupy room on 3d floor in brick building 24x18; use 5 lathes, 1 drop press, 1 pair rolls. Employ 22 persons when in full operation. Motive power adjacent.

Narragansett Brick Co., incorporated 1847, capital $225,000, G. W. Hallett, President, N. F. Potter, Jr., Treasurer; office 158 Dyer, manufactory at Barrington, 10 miles from the city, down the bay. These works cover 30 acres, and employ 200 persons, manufacturing 15,000,000 brick per year. This brick yard is the largest in New England, but there are others who manufacture more brick. The motive power is furnished by a 50 horse power engine, which drives 1600 feet of shafting; also connected with these works is a peat manufactory from which the fuel is obtained for the works. The peat is prepared by Potter's patent machinery.

The American Paper Collar and Bosom Co., 22 Clifford, incorporated 1865, capital $275,000; A. W. Godding, President, Frederick Miller, Treasurer; J. G. Tinkham, Agent and Secretary. This manufactory occupies the 4th floor of a brick building 40x30, use three machines, employ 6 persons, and finish 50,000 collars and bosoms per month.

American Steam and Gas Pipe Fitting Manufacturing Co., 22 Clifford, successors to A. J. Perry & Co., who commenced in 1853; the present company was incorporated 1867, capital $75,000; Reuben Thorpe, President, H. H. Brown, Treasurer, Nahum Perry, Secretary and Agent. Their specialty is the manufacture of Perry's Patent Steam Heating Apparatus, of which about 50 are now in use. Motive power hired from engine adjacent.

James H. Field & Co., 186 to 190 Eddy street, commenced business in 1862, being successors to James H. Reed, who commenced in 1852. They manufacture medium styles of chamber furniture, in wooden building 40x100 feet, 2 stories, another of brick 40x100 feet, 2 stories, a rear building of wood 70x40 feet, 2 stories; also, dry and hot house connected. Use a 15 horse power engine, regular cylinder and two 30 inch boilers. The engine of F. Fuller's make. Use a rotary planer, 4 circular saws, 1 Daniels' planer, 1 boring machine, 2 gear cutters, 1 scraping machine, 2 turning lathes, 1 tenoning machine, 1 mortising machine, 1 cutting swing saw. Amount of business per year $100,000; employ 60 hands.

Lippitt Woolen Co. Office, 37 Weybosset street, Providence, manufactory, Woonsocket, R. I. Incorporated 1865. Capital $350,000. Henry Lippitt, President, Providence; C. H. Merriman, Treasurer, Providence; A. J. Elwell, Superintendent, Woonsocket. This company use 18 sets of the best kind of woolen machinery, and work up 600,000 lbs. of the finest Ohio and Pennsylvania wool per year, into fancy cassimeres and fine coatings. The inauguration of this company has created quite a competition with the famous Harris goods, which manufactory is also located at Woonsocket. The motive power is furnished by a 120 horse power engine, horizontal tubular boiler, Corliss's patent, and one Jonval turbine water wheel. Employ 275 persons. (See also Woonsocket.)

Selling agents, Denny, Jones, & Poor, 21 and 23 White street, New York.

The Silver Spring Bleaching & Dyeing Co., located near the city line, in North Provedence. Treasurer's office Weybosset street; incorporated in 1864; capital $200,000; Henry Lippitt, President, Charles H. Merriman, Treasurer, Albert Armington, Superintendent of bleachery, John Burton, Superintendent of dye works. The dye works have been lately erected, (1868.) Employ 150 persons, and wash and dye about 1,800 pieces of cloth per day: consisting of jaconets, silesias, sheetings, &c. Use 3 engines 120 horse power each. Corliss patent; boiler capacity of 500 horse power, consisting of a 300 Harrison and a 200 plain cylinder.

Social Manufacturing Co., located at Woonsocket. Office, 37 Weybosset street, Providence. Incorporated 1855. Capital $300,000. Orin A. Ballou, President, Providence; Henry Lippitt, Treasurer, Providence; Charles Nourse, Superintendent, Woonsocket. This company manufacture fine sheetings, shirtings and silesias. The mills have 40,000 spindles; use 70 bales of cotton per week. Employees, 600. Motive power furnished by one pair of engines, 250 horse power each, and two Jonval turbine water wheels.

The agents of this company, are Wm. C. Langley & Co., 17 and 19 White street, New York.

Potter & Symonds, gold and silver jewelery, 29 Eddy, room 30x60 in 4th, floor of brick building. Employ 16 persons. Amount business done per year $50,000. Motive power 1 horse, hired of engine adjacent.

James E. Chace, plated jewelry, 193 Eddy, occupies room in 4th floor 40x60. Employs 10 persons. 1 horse power hired from engine adjacent.

Barbour & Heathcote, 140 to 146 Eddy, corner Friendship, manufactures Eiswald patent low water indicator. Commenced business July, 1867, in first floor, containing 1500 square feet. Use 6 lathes, planer, upright drill, filing machine, 1 large boring mill. Use 2 horse power; turn out 600 per year. This new invention is just being introduced. Employ 8 persons, the business of plumbing and manufacturing of machinery, is carried on in connection.

H. A. Billings, brass founder, 54 Clifford street. Commenced business in 1867, occupying building 40x90, 1 story. Employs 5 persons, turning out about 300 pounds per day of light brass trimmings &c., business amounting to about $10,000 per year.

Adams & Knight, 79 Pine street, tortoise shell, combs, and jewelry. This business was commenced by Claflen & Co., about 20 years since, and was succeeded in 1868, by the present firm. Occupy part of 3d floor, 50x50. Employ 12 persons.

John B. Wood, cocoanut dippers, 81 Pine street, occupies the first story of wooden building 40x45; employs 3 persons; dippers manufactured in one day, 500. This manufactory was burned out in 1868. This business has been conducted for the past 25 years. Office 37 Canal street.

Moulton & Remington, carriages, 138 Eddy street. Commenced business in 1857, who succeeded E. Moulton, who commenced in 1848. Occupy 6,000 square feet, beside store house of 3,000 square feet; employ 30 persons, and do a business amounting to $35,000 per year.

Lacing Button Hook Co., 22 Clifford street, incorporated 1868. Capital $50,000. This company was organized in 1868. John S. Palmer, Agent.

THE PROVIDENCE CITY MILLS.

116 DORRANCE STREET, - - - - Providence, R. I.

WM. H. VAUGHAN, PROPRIETOR,

Manufacturer of the best substitutes for

CREAM TARTAR

—AND—

ARGOLS

found in the country.

Vaughan's Chemical Color Composition,

A substitute for Cream Tartar or Argols, for Dyers' use. Comes much less in price, and takes less in quantity. Satisfaction guaranteed.

City Mills Cream Tartar, or Superphosphate,

Equal in strength and power of neutralizing soda to the best Crystal Cream Tartar; sold at about half the price of Pure Cream Tartar, and is equally as good in baking bread. Also, manufacturer of the best and cheapest

SUBSTITUTE CREAM TARTAR AND SUPERPHOSPHATES

In the country. Perfect Satisfaction guaranteed. Orders respectfully solicited and prompt attention will be given them. Address—

WM. H. VAUGHAN, 116 Dorrance St., Providence, R. I.

PALMER & CAPRON, plated and gold rings, 120 Dorrance street; commenced business in 1865. Occupy 4th floor 38 x100; employ 15 persons. Motive power 3¼ horse. Turn out 1,500 per day, business amounting to about $60,000 per year.

FRANKLIN OLDS, manufacturer of grinding mills, 323 Eddy street, commenced business in 1857; employ 4 persons, occupy third floor 30 x 50, finish about 25 per year. The business of millwrighting is carried on in connection. J. G. Gibson, machinist, is connected with this concern, who conducts business on his own responsibility.

DANIEL B. WAITE, roll plated jewelry and lockets, 319 Eady street. Commenced business in 1868, as successor of Angell & Waite, who commenced business in 1864. Occupy a part of 2d story 75x40. Employ 30 hands; business amounts to about $50,000 per year.

E. RICHARDS, brass swivels for watch chains, 319 Eddy street. Manufactures 12 gross per month.

FANNING & POTTER, 79 Pine street, plated and gold jewelry. Commenced business 1856; occupy 2d floor 45x80. Employ 14 persons.

W. B. RIDER's dye wood and drug mill 325 and 327 Eddy street. Commenced business 1846. Occupy building 60 x90, 3 stories. A 60 horse power engine, Corliss patent and make. Employ 9 persons and grind 1,000 tons per year.

ARNOLD & WEBBER, successors to Dodge, Peirce & Co., solid gold rings, 46 Page street. This firm commenced business July, 1868, occupy part of second floor in connection with Dodge & Kotzow, 25x30. Employ 4 persons. Manufacture about 8 dozen per week.

DODGE & KOTZOW commenced business July 1st, 1868, being a branch of Dodge, Pierce & Co., who are now dissolved, manufacturing solid gold chains, occupy room with Arnold & Webster, 46 Page street, and do a business of about $50,000 per year.

WM. T. LEWIS & Co., electro plate jewelers, 46 Page street, commenced 1868; occupy 1st floor, 25x30, employ 6 persons and do a business of about $6,000 per year.

BROWN, COOK & Co., solid gold lockets, 44 Page street, bought out G. B. Gray, 1862, and occupy 2d story building, 22x28, with L. 20x28; employ 7 persons.

FESSENDEN & Co., 52 Friendship street, silver-ware manufacturers; commenced business 1859, occupy 1st floor, 70x40; employ 25 persons, and manufacture all the different styles of small ware.

SAMUEL WOODBURY, plated and solid gold jeweler, 54 Friendship street, occupies room 50x30, with L. 30x20; employs 10 persons.

C. W. B. BENNETT, oreide and plated jewelry, 54 Friendship street, occupies room 40x40; commenced business 1846.

RICHMOND & SCOTT, plated and gold jewelry, 54 Friendship street; this company occupy room 20x36 feet, employ 10 persons, make a specialty of rings, and do a business of about $7,000 per year.

CHARLES F. IRONS, gold and plated jewelry, 54 Friendship street, occupies room 25x30 on 3d floor; employs 10 persons, and does about $12,000 worth of business per year.

L. W. PIERCE & Co. plated and gold jewelry, 54 Friendship street. Commenced business in 1866. Occupy room on the 4th floor, 30x20 feet. Employ 8 persons.

HENRY BLUNDELL & CO.

CORNERS OF FRIENDSHIP, ORANGE AND PECK STREETS, PROVIDENCE, R. I.,

SOLE MANUFACTURERS OF

BLUNDELL & COMPANY'S

Improved Jewelers' Tools!

Particular attention paid to Grinding and Polishing Rolls.

OFFICE, 98 ORANGE STREET.

HENRY BLUNDELL, JOHN MC WILLIAMS, HERBERT E. BROWN.

Henry Blundell & Co., machinists and manufacturers of jewelers' tools, Nos. 98 and 106 Orange street, and 63, 65 and 69 Peck street. Messrs. Blundell & Co. are extensively engaged in the manufacture of all kinds of jewelers' tools, and they are the only parties in the country who make this business a specialty. They have given it their personal attention, and, after years of study and experimenting, they have secured patents on several machines, and their machinery is of a superior order to any in the country. They are constantly receiving orders from all parts of the United States and foreign countries for their patent presses, drops, rolling mills, lathes, oval and independent jaw chuck, slide and bracelet rests, dies, punches, &c. They have the best machines in the country for grinding and polishing rolls.

In connection with the above named business, they carry on brass founding and finishing, where they manufacture all kinds of plumbers' fittings; also, pumps, mill hydrants, valves, water gates, discharge pipe, couplings, &c.

The business was established by Henry Blundell in 1849. In 1866 he associated with himself John McWilliams, and in 1869, Herbert E. Brown was admitted to the firm. In 1867, the business of Messrs. Blundell & Co. had so increased that they found it necessary to lease the premises which they now occupy. These premises contain over 8,000 square feet of land, which is nearly covered with buildings. The main building extends from Orange st. to Peck st. The lower story is occupied as a machine shop; the second story for brass finishing, copper and plumbing work, and the third story is their pattern room.

In the building next south is their engine, brass foundry and shop for the manufacture of heavy shafting, gearing, pulleys, and machine jobbing (on the lower floor), and a pattern shop above.

The building next north is occupied as a blacksmith shop, on the first floor, and the grinding room in the next story.

In the different departments of this establishment are employed from 40 to 50 men.

H. D. Smith, plated and gold jewelry, 54 Friendship st., occupies room, 20x50. Commenced business in 1866. Employs 6 persons.

Pretteplace & Bartlett, soap and candles, 181 Friendship street, commenced business in 1854. Occupy two story building 40x30; also, one 30x40, one story brick. Employ 5 persons; business amounting to about $45,000 per year. 10,000 lbs. soap manufactured per week.

C. L. Potter, pearl goods, 248 Pine street; commenced business in 1865; occupies one room 40x90; employs two persons.

Lincoln Manufacturing Co., 14 Byron street; incorporated in 1866; capital $40,000. Francis S. Lincoln, President, George H. Lincoln, Treasurer. Soap and candles, occupy 1 building, 2 stories 125x35. Employ 10 persons; Use Earle's steam pump for boiling purposes; no motive power, and sell about 70,000 lbs. of soap per month.

John Kendrick, reed and harness maker, 26 Clifford street, office 14 Exchange place, 40x80 feet, commenced business in 1848, now occupying a building 4 stories high, 90x40 feet; employing 60 persons, and using 30 harness knitting machines. He consumes 800 lbs. of twine per month; his motive power is furnished by a Corliss engine, of Corliss patent and make; 2 boilers. He also has a manufactory at Fall River and one at Woonsocket, notice of which will be found there.

Providence Brass Foundry, 412 Eddy street, A. H. Manchester, Jr., proprietor. Commenced business in 1847; Employs 4 persons, occupies 50x110 feet brick building, 4 stories; 4 horse power engine, Charles Mann, of Troy, manufacturer; amount of business $60,000.

N. Bangs Williams, 185 Eddy street, self-regulating lubricators and oil cups. Commenced business in 1868; occupies a room on 3d floor; employs 15 hands; salesroom 75 John street, New York.

Henry Gill occupies a room 80x30, in third story of brick building 193 Eddy street, for the manufacture of tapes and webs. Uses 6 Knowles' patent fancy looms, 1 spooler, 1 warper; employs 8 hands, turning out 4,000 yards per day.

James R. Wood, butcher and fancy steels, 110 Dorrance street. Commenced in July, 1867, in second story of wooden building 60x20. Uses 50 lbs. emory per year; 15 pounds glue, 150 lbs. of pewter and lead per month. Employs 5 persons, using 600 lbs. of patented milled steel in the manufacture of 100 doz. per month.

American Horse Nail Co. Capital $100,000. I. H. Southwick, President, George Lewis Cooke, Treasurer, formerly occupied buildings on Dyer street, but was removed to Sprague street, adjacent to the Rhode Island Horse Shoe Co. This company commenced business under the present management in 1865. Occupy buildings 50x100. Employ when the works are in full operation 50 persons; use 10 patent machines capable of turning out 12 tons per week.

The oldest and largest gold chain and jewelry manufactory in the United States, is Sackett, Davis & Co., Friendship, corner Richmond street. Their manufactory is 100x40, 4 stories, brick. The business was established some 40 years since by Adnah Sackett, who is now deceased, the firm succeeding was Sackett, Davis & Potter, who continued till 1850, when the present firm was formed consisting of Geo. H. Sackett. Thos. Davis, Geo. P. Tew and Lauriston

A Cheap & Perfect Substitute for Cords & Weights.

BUTTERWORTH'S

IMPROVED

WINDOW SPRING.

PATENTED APRIL 16, 1861.

—o—

CERTIFICATES.

PROVIDENCE, June 26, 1861.

I do not hesitate to pronounce Butterworth's Improved Window Spring superior to any which has come to my notice. JAS. C. BUCKLIN, Architect and Builder.

PAWTUCKET, June 28, 1861.

In our opinion, Butterworth's Improved Window Spring is not surpassed by any which we have ever seen. D. D. SWEET & CO., Sash, Blind and Door Manuf's.

U. S. ARMORY, SPRINGFIELD, Mass., September 3, 1861.

I cheerfully recommend Butterworth's Window Spring as superior to any which has come to my knowledge. JOHN D. LORD.

CINCINNATI, Ohio, May 31, 1867.

This is to certify that we have had J. C. Butterworth, Jr.'s Patent Sash Fasteners in constant use for the past four years, on the heaviest windows in this city, and to-day they work to our entire satisfaction, being much cheaper, and less trouble than cords and weights. WARDLE & JAMES, No. 97 West 7th St.

J. C. BUTTERWORTH, JR., 542 Eddy St., Providence, R. I.

Towne. Employ about 100 persons. Motive power furnished by 50 horse power engine, Greene's patent and manufactured by Providence Steam Engine Company, and use $100,000 worth of gold and silver per year, for the manufacture of chains, which is their specialty. This firm enjoy a wide spread reputation for solid gold chains of unique and elegant designs and reliable quality. Salesroom, 199 Broadway, New York.

RICHARD CROSS, pen and pencil case gold pens, plated and gold jewelry, 54 Friendship street. Commenced business 1857, occupy a room 40x25. Employs 16 persons and does a business amounting to $30,000 per year.

THE PROVIDENCE DYEING, BLEACHING & CALENDERING Co. was organized in 1814, for the purpose of dyeing, bleaching and calendering of cotton cloths. These several branches of business were conducted as a private co-partnership for 29 years, until 1843 when it was incorporated by an act of the Legislature, with a fixed capital of $192,000, divided into 192 shares at the par value of $1,000 each share. The establishment is at present divided: the dyeing and finishing of cambrics, jaconets, silesias and other fancy cotton goods is executed at their new works, recently erected at great expense, and the requisite machinery for such work is of the most approved style, corner Mathewson and Sabin streets. Their bleaching establishment is at the village of Olneyville, within the city limits, about one mile from the former works, where that branch of the business is carried on exclusively. The works on Mathewson and Sabin streets are operated by a Corliss steam engine of about 200 horse power, and the bleachery, at Olneyville, by both steam and water power. About 150 hands are employed in the two establishments.

J. C. BUTTERWORTH, Jr., Agent and manufacturer of Butterworth's Improved Window Springs, No. 542 Eddy street. The new and improved window spring patented April 16, 1861, by Mr. J. C. Butterworth, of this city, is so simple and convenient, that it commends itself most favorably to the public notice. It brings within the reach of all, the luxury of the weighted windows in the houses of the rich, with a greater security in fastening, and at a price hardly appreciable. A spring, and a cam covered with rubber, are the whole machinery; there is no possibility of trouble in its use; it holds the sash at any desired elevation secure against any sudden fall, and once down, the window cannot be opened without a direct force on the lever.

So simple and useful an invention for windows he claims has never before been offered to the public. The fastener once lifted, a well adjusted sash can be raised and retained in any position without again touching the lever; to lower it a slight touch is sufficient, and the instant that touch is removed the sash is again firm. The upper sash, on which it operates precisely as it does on the lower, is also held firmly in position by it, and all rattle and jar are avoided. It is an admirable spring for car and omnibus windows, in short for all windows requiring raising and retaining. With the exception of cords and weights, which are costly and require attention and repairs, he claims that there has been no invention so sure and commodious as Butterworth's window spring. These springs, are, in fact, a complete substitute for pulleys and weights, at about *one sixth* the cost. Parties in want of springs, should address J. C. BUTTERWORTH, JR., No. 542 Eddy street.

They may also be obtained of the following agents: Burditt & Williams, Frye, Phipps & Co., Bogman & Vinal, Brooks & Darling, Boston, Mass.; C. Foster & Co., Worcester, Mass.; Joseph Newell, Salem, Mass.; S. Augustus Bemis, Springfield, Mass.; A. A. Beckwith, Fitchburg, Mass.; James Doull, New Bedford, Mass.; William H. Todd, Northampton, Mass.; Hotchkiss & Mersick, New Haven, Conn.; L. M. & G. I. Hagar, Burlington, Vt.; W. G. Hancock, Franklin, N. H.; H. L. Emerson, East Wilton, N. H.; Fogg & Bridges, Bangor, Me.; Emery, Waterhouse & Co., Portland, Me.; T. G. Arey, Bucksport, Me.; Sowles & Edwards, Plattsburg, N. Y.; George Coyne, Philadelphia, Pa.; C. F. Gray, Chicago, Ill.; Joseph C. Wright, Birdsboro', Pa.; John Gibson & Co., Cincinnati, Ohio.; L. M. Alger, Mansfield, Ohio.; Charles Humes, St. Louis, Mo.; T. T. Halstead, New Albany, Ind.; Tefft, Casey & Kellogg, Detroit, Mich.; A. McBride, Louisville, Ky.; C. G. Forshey & Co., Galveston, Texas,; Lee, Crandall & Co., New Orleans, La.

STILLMAN WHITE,

BRASS FOUNDER

No. 1 Bark Street, Providence, R. I.

SOLE MANUFACTURER OF S. WHITE'S LINING METAL.

CASTINGS OF ALL DESCRIPTIONS.

THE RHODE ISLAND WIRE WORKS, J. L. Sherman & Co. proprietors, was established in August, 1866. They occupy rooms 70x30 feet, in the building situated at No. 151 Broad street, in which is their office and salesroom; also, have a room 45x40 feet, in the four story brick building, located at 82 Orange street. They manufacture every description of wire goods, and netting of any size or mesh, having in use four large wire looms, besides other necessary machinery. They employ 12 hands, consume annually about 25 tons of wire, and do a business of $25,000. (See advertisement, front colored page.)

THE STAR TOOL CO., manufacturers of machinists' tools, occupy the first floor 40x25 feet, in a 3 story wooden building, located at 236 Washington street. This company commenced business in August, 1868, and have nine employees. Their machinery, consisting of lathes, planers, drills, &c., mostly of their own manufacture, is driven by an engine of 20 horse power, in the works of Volney W. Mason & Co. in building adjacent. The company is composed of E. F. Allen, Charles Campbell and E. A. Bramau.

THE BRASS FOUNDRY owned and occupied by Stillman White, located at No. 1 Bark street, is 26x90 feet, and has been in successful operation for about thirteen years. At these works there is manufactured every variety of Brass, Bronze and Composition Castings for Steam Engines, Cotton Machinery, Steam, Gas, &c.; also as a specialty, S. White's Anti-friction Lining Metal, for bearings, the best in use, and warranted to give entire satisfaction. Mr. W. consumes about a ton of castings per week, and does business of upwards of $40,000 annually.

SPICERS & PECKHAM, manufacturers of Cooking Stoves, Furnaces, Ranges, Hollow Ware, Sinks, &c., occupy a three story brick building with attic, 50x50 feet, with an L. 150x40 feet, one story, located on Cove street, opposite the Stonington Railroad repair shop. The business was established in 1850, by Messrs. Dutee Arnold, & Co., and came into the hands of the present proprietors in 1862, who now employ 50 persons, and consume from 900 to 1,000 tons of iron annually. An engine of 20 horse power, built by The Providence Steam Engine Co., of this city, supplied by steam from one large flue boiler, furnishes power for their machinery.

H. L. KENDALL commenced the manufacturing of soap and candles, in Providence, in 1827. He was succeeded by H. L. Kendall & Co, who continued until 1860 when a stock company was formed bearing the name of "Kendall Manufacturing Company," having a capital of $125,000. They occupy a 4 story brick building 90x64 feeet, on the corner of Friendship and Page streets. Their engine is Corliss' patent, Harris' make; 15 horse power with 2 flue boilers. The sale of their soaps and candles is for home consumption.

WILCOX & BATTELL, manufacturers of solid gold jewelry, occupy a floor 25x80 feet in brick building located at No. 125 Broad street, established in 1858. They employ 30 persons, and do a business amounting to about $100.000 per annum. This company are the sole manufacturers of Wilcox's patent studs, sleeve buttons and armlets, a very superior invention.

JAMES ELDRED, manufacturer of electro and gold plated jewelry, occupies a room 50x50 feet, in building located at 30 Page street. He commenced business in 1833, and has 20 employees.

A. V. POTTER, manufacturer of electro and plated jewelry, occupies a room on the third floor of brick building situated at No. 51 Friendship street. He employs 20 hands and does business amounting to $20,000 per annum.

GEORGE CHATTERTON occupies a 4 story wooden building 40x50 feet with an ell 50x25 feet, 2 stories, located at 25 Randall street, for the manufacture of files, having been established in 1839. The manufacture of steel files by hand employs 30 persons, who consume annually about 60 tons of steel.

L. CARR, & Co., manufacture gold jewelry, occupying a room 25x35 feet in the fourth story of brick building, located at No. 58 Eddy street, (formerly 15.) They commenced business in 1863, and employ 8 persons on rings and lockets, principally; doing business of about $10,000 per annum.

J. M. CURTIS occupies a building 40x20 feet, at 148 Carpenter street, and employs 14 persons in the manufacture of cigars. He has facilities for turning out 325,000 cigars per annum and does business of about $25,000. He has a store at 126 Westminster street.

A. N. WINSLOW, commenced business in 1864. He occupies a room 50x50 feet, in a brick building, located at No. 30 Page street, and employs 12 hands in the manufacture of alabata, gold and silver plated watch cases, and tobacco boxes.

ROBERT BARTON, manufacturer of plated jewelry, occupies a room 50x50 feet, in the brick building, located at No. 30 Page street. He commenced business in 1853, employs 25 hands, and does business amounting to $50,000 per annum.

SPINK & MASON, manufacturers of gold and electro-plated jewelry, at 30 Page street, occupy a room on second floor, 50x50 feet. They commenced business in 1862, employ 20 persons, and do business amounting to $25,000 per annum.

WILLIAM SWEENEY,

Manufacturer of, and dealer in all kinds of

MATTRESSES,

LOUNGES, FEATHERS, &C.,

OPPOSITE 124 CANAL STREET,

PROVIDENCE, R. I.

Nathaniel Grant & Co., manufacturers of plated jewelry, occupy the third floor, 25x100 feet, in the brick building located at No. 111 Broad street. They employ 30 persons, and do business amounting to about $50,000 per year.

Isaac Stone, manufacturer of electro-plated jewelry, commenced business in 1859. He occupies a room 50x30 feet, in a three story wooden building, located at 53 Friendship street, and does business amounting to about $18,000 per year.

James Quinn & Son, manufacturers of shoe lacings and spool thread, occupy a room 40x40 feet, in a four story wooden building, located at No. 32 Smith street. They run 25 braiders, and produce about 50 gross of lacings per day, giving employment to 9 hands.

Albert W. Page, occupies a two story wooden building, 22x64 feet, located at No. 14 Charles street, for the manufacture of dipped tallow candles, making about 100 lbs. per week, or about 100,000 candles per annum.

Tingley Marble Co., manufacturers of monuments, tablets and headstones of marble, freestone and granite; also, marble mantels, washbowls, slabs, factory rolls, soapstone washtubs, &c. Were established in 1811, and are the oldest and largest works of the kind in the State. Their marble works and office is located at No. 131 South Main street, and their freestone yard and wharf at 417 South Main street. They employ 77 persons. Their machinery at their marble works is driven by a steam engine of 25 horse power, built by the Corliss Steam Engine Co., of this city.

Miller & Andrews, manufacture patent round belting at 170 Carpenter street. They commenced business in 1857.

B. P. Cunningham occupies a building 50x100 feet, four stories and another 50x100 feet, two stories, at 136 Broad street. He manufactures furniture and upholstery goods. The greater part of these buildings being used for his store. He employs 50 persons.

Wm. F. Baker & Co., brewers and malsters, occupy a two story wooden building 60x50 feet, located at the corner of Richmond & Pine streets. They commenced business in Sept. 1867. Employ 4 persons and do a business amounting to $50,000 per annum. This building was formerly occupied by C. Fletcher & Co., for 30 years.

P. Corbet & Co., manufacturers of bottled soda and sarsaparilla, occupy a 2½ story wooden building 30x45 feet, located at the corner of Pine and Richmond streets. This firm commenced business at 25 Washington street, Nov. 9th, 1866, and moved to their present location, Aug. 1st, 1867. They employ 9 hands and bottle during the summer 600 doz. and do a business amounting to $20,000 per annum.

Hope & Co., manufacturers of engraving machinery at 131 Dorrance street. Commenced business in 1867. They occupy a room 40x30 feet, and employ 8 persons. Their machinery is driven by an engine in building adjacent.

William Sweeney, successor to Woods & Sweeney, occupies a 2 story wooden building 80x30 feet, located opposite 124 Canal street, where he manufactures and has for sale all kinds of mattresses, lounges, feathers, &c. The business was established in 1854, at that time giving employment to but one boy and girl, but by perseverance and attention to business it has gradually increased so that at the present time he employs 20 persons; consuming in the manufacture of mattresses alone, about 70,500 yards of cloth, and 120 tons of filling; turning out weekly 150 mattresses, and does a business of upwards of $30,000 per annum.

Jonathan Jencks occupies the 3d story of brick building, situated on South Main, corner of Pike street, 45x82 feet, for the manufacture of spool thread. He commenced business in November, 1867; employs 25 persons, and has a capacity for turning out 600 dozen spools per day, and does business amounting to $60,000 per annum; running 12 winders, 4 twisters, 4 dressers, 1 reel and 1 cop spooler.

Rathbun & Richards, occupy a room 70x25 feet, in building located at 125 Broad street, for the manufacture of gold jewelry. They commenced business in 1844, and employ 20 hands. Their motive power is furnished by a 35 horse power engine, built by N. T. Greene.

J. B. Mathewson & Co., manufacturers of gold jewelry, at 111 Broad street, occupying a room 23x100 feet. They commenced business in 1834, and employ 20 persons; power derived from engine adjacent.

G. & S. Owen & Co., gold jewelry manufacturers, occupy a room 40x100 feet, in building located at 111 Broad street. The firm is composed of George Owen, Smith Owen, W. H. Hiscox and R. L. Allen. This business was established in 1834, and employs 30 persons.

S. M. Lewis & Co., manufacturers of gold and plated jewelry, occupy a room 30x106 feet, located at 58 Eddy street. The firm is S. M. Lewis, J. C. Lewis, and Charles T. Medbury, and was established in 1852; they employ 25 persons, and do a business amounting to $60,000 per annum.

Hilton Bros. & Co., occupy a wooden building covering about 8,000 square feet, located at No. 63 Stewart street, for the manufacture of cement. They commenced business in 1861. There is also a paper collar manufactory carried on in connection, by S. F. Hilton, who commenced this business in October, 1867. They employ in both concerns 30 persons, use 12 machines and have a capacity for doing business to the amount of $300,000 per annum. A six horse

C. & E. TAFT,

Manufacturers and dealers in

Doors, Sash, Blinds and Shutters,

—— Also dealers in ——

ENGLISH, FRENCH AND AMERICAN WINDOW GLASS,

PLATE, ENAMELED, COLORED AND ORNAMENTAL GLASS,

NOS. 23 & 24 COVE STREET,

(Near Boston and Providence Railroad Station.)

power steam engine, built by the Fuller Iron Works, drives their machinery.

PROVIDENCE SKIRT CO., occupy a two story wooden building 40x75 feet, located at 79 and 81 Stewart street, for the manufacture of hoop skirts, skirt tape, web and suspenders. This company commenced business in Windham county, Conn., in 1860, and moved to their present location in 1863. They employ 60 persons, using 5 looms and 50 braiders, and turn out about 1,300 feet of tape per day. The braiders cover about 250 lbs. of wire per day. The company is E. T. C. M. & H. D. Smith.

HENRY W. ELLIS occupies a two story wooden building, covering 8,000 square feet of land, located at the junction of Clifford, Dyer and Orange streets, for the manufacture of all kinds of heavy team wagons, carts and wheels. He commenced business in 1851. Employs 20 persons, and turns out about 100 wagons per year. He is also lumber dealer and manufacture of rims, spokes, and the only manufacturer of lance wood shay shafts and poles in the city.

CHARLES H. BROWN & CO. occupy rooms at 193 Eddy street, for the manufacture of gold jewelry. They commenced business in Sept. 1867. Employ 12 persons and do business amounting to $20,000 per annum.

PROVIDENCE BOX CO. occupy a building located on Fountain street, for the manufacture of all kinds of wooden boxes and kegs, and as a planing and moulding mill. They commenced business in January, 1868, and employ 14 persons. A 20 horse power engine built by the Providence Steam Engine Co., drives their machinery. Their keg shop is located on Grant street.

SAMUEL ALLEN, Agent, occupies a room 35x30 feet, in a 4 story brick building, located at No. 72 Pine street, for the manufacture of electro French Etruscan work. He commenced business in 1861, and has 20 employees.

HASKELL & CO., manufacturers of gold and plated jewelry, occupy a room 115 x 40 feet, in the 4 story brick building, located at No. 72 Pine street. The commenced business in 1860, and have 40 employees, and do business of about $100,000 per annum. The firm is composed of Willard Haskell and Nathan J. Smith. I. S. Haskell is salesman.

J. P. HASKINS & SON occupy a 2 story brick building 60 x90 feet, located on Summer, corner of Meadow street, for the manufacture of wooden boxes. They run 2 planing machines and 10 circular saws, and have a capacity for producing from 7,000 to 8,000 boxes per month, and do business of $40,000 per annum.

G. C. HOPKINSON occupies a room 40x45 feet, in the building located on Friendship, corner of Page street, for the manufacture of plated jewelry. He employs 25 hands.

HASKINS, MYRICK & CO. occupy a 1 story brick building 75x21 feet, located on Summer, near Meadow street, for the manufacture of kegs. They commenced business in 1868; have 7 employees, and turn out about 500 kegs per day. J. P. and Wm. B. Haskins, and E. O. and A. B. Myrick constitute the firm.

G. G. HICKS, AGENT, occupies three two story wooden buildings, 50x100, located at 442 and 446 South Main street, for the manufacture of stationary and marine boilers. He commenced business in 1861, employs 30 persons, and works up over 200 tons of iron annually; uses three large lathes, 1 planer, 2 upright drills, and two power punches. Mr. Hicks was formerly with the Providence Steam Engine Company.

It sometimes seems almost incredulous how some small manufacturing business is built up by energy and enterprise, until its magnitude is such that a single month's production seems sufficient to supply the world. These remarks apply more especially to the MILES TILL MANUFACTURING CO., at 400, 402, 404 and 406 South Main street. This company use from 25,000 to 30,000 pounds of cast iron, besides iron and brass wire annually, and about 100,000 feet of black walnut and pine. Most of the old countries use this patent money drawer, besides the immense amount of them used in the United States. The Company was incorporated in 1869, the business was established by Mr. A. O. Miles, in 1859, and although he has had great competition, he has steadily crept up the ladder, until he now stands at the topmost round, making more than all his competitors, ten in number. The secret of his success is: the large number that they manufacture enables them to make a much better article and at a lower figure than can be afforded by other parties who do not make it a specialty, and in introducing his goods to the public he has had an eye to business, and has secured as wholesale agents throughout the country the Fairbanks Scale Company, whose reputation is second to none on this continent.

THE PROVIDENCE MARINE RAILWAY CO. is a copartnership with a cash capital of $36,813 56. The business of the company is, that of hauling out vessels on marine railways, and the repairing and building of every kind of vessel.

The company first commenced business in Sept., 1866. They have 2 sets of ways, situated on Burges Point, East Providence, and can haul out any vessel whose measurement does not exceed 1,000 tons. The company have, besides the two sets of ways above named, a building of two stories with two ells, of one story each, and a blacksmith's 1½ stories. They also have on the stocks the frames of two schooners; one of which is about 600 tons and the other 200 tons.

The ways are operated by steam; the engine used being a Donkey engine, made by F. Fuller, Esq., of this city.

The officers of the company, are P. Chase & Sons, Agents at the Ways, Burgess Point, East Providence. C. T. Child, Treasurer, 175 South Main street.

MITCHELL BROS. occupy the lower floor of a brick building 20x60 feet, located at 103 North Main street, for the manufacture of hoop skirts. They commenced business in May, 1866, and employ 8 hands. They also have a store at No. 39 North Main street.

GEORGE S. DOW occupies 2 floors 80x40 feet, in the brick building, located at 84 South Water street, for the manufacture of tents, sails, and awnings. He commenced business in 1846, and employs 14 hands.

HUNT & OWEN commenced the manufacture of gold jewelry in 1841. They occupy part of the brick building located at 111 Broad street, and employ 25 hands.

The partners are G. Hunt and E. Owen.

A. H. DAVIS manufacturer of extension tables, and desks, occupies a room 40x50 feet, in a 2 story brick building located at No. 20 Smith street. He commenced business in May, 1868, has 4 employees, and produces annually about 300 tables.

TURNER WADDING MILL, W. A. Mauran, proprietor, occupies a stone mill 200x40 feet, located at Olneyville, near the city, for the manufacture of carpet wadding. The business was established January 1st, 1869. Employs 25 persons; runs 8 cards, 3 pickers, 2 willows, 3 lappers, 2 large drying machines; driven by an engine of 40 horse power, Noble T. Greene's patent, with 2 cylinder boilers 60 horse power, built by the Providence Steam Engine Company, of this city. The production of the mill is about 3,000 yards of batting daily. Office and storehouse, 60x30 feet, with out buildings, &c., situated on the Woonasquatucket river.

KNOWLES & LADD, manufacturers of coin $\frac{900}{1000}$ and sterling $\frac{925}{1000}$ fine silver ware, occupying the 2d floor of a 4 story brick building 160x45 feet, situated on Pine, corner Eddy street. The business was established in 1832, by H. L. Webster & Co. The present firm succeeded in 1865, at 11 Eddy street, removing to their present location, January 1st, 1869. They employ 50 persons; run an engine of 40 horse power. They have a capacity for 100 hands, intending to employ that number. Office in New York, No. 20 Maiden Lane. J. B. Knowles, S. J. Ladd and S. M. Knowles constitute the firm.

JERAULD & HOLMES, manufacturers of paper boxes, occupy the upper or 5th floor 60x60 feet, and a room on the 4th floor at No. 37 Custom House street. The business was established in February, 1869. They have about 50 employees; power furnished from an engine, built by the Fuller Iron Works, of this city.

GROSS & BROWN SAW AND MACHINE CO., occupy the lower floor of a 4 story brick building, 100x40 feet, located at No. 248 Pine street, for the manufacture of patent removable tooth, and planing saws, both circular and upright. This company commenced business in May, 1868, and have 12 employees. Their machinery is driven by a Woodruff & Beach engine, of 80 horse power. J. Mason Gross, President and Secretary; David H. Gilderslieve, Treasurer.

L. F. PEASE occupies the upper floor of a 4 story brick building, located at the corner of South Water and Planet streets, for the manufacture of tents, sails and awnings. He commenced business in 1866. Employs 6 hands and does business amounting to $17,000 per annum.

The celebrated PAIN KILLER, established in the year 1839, is manufactured in Providence, at the old location 78 High street, with branches in Cincinnati, Ohio, Montreal, Canada, and London, England.

This medicine has come to be considered an article of prime necessity, as a remedy for bodily ailments and is found at all the principal ports of the world with which we have commercial relations.

The labor required in the manufacture of bottles, boxes, printing matter, putting up and preparation of the article for the market, gives employment directly and indirectly to a large number of hands.

The business is conducted by Mr. Edmund Davis, son of Perry Davis, the original inventor of the PAIN KILLER.

STURDY & MARCY occupy a room 70x40 feet, in the third story of brick building, situated at the corner of Pine and Eddy streets, for the manufacture of gold and plated jewelry. They commenced business in September, 1867, and have 20 employees.

THE CITY MACHINE CO. occupy a 3 story brick building 50x150 feet, located on Harris avenue, near the Rhode Island Locomotive Works, where they manufacture cotton and woolen machinery, employing 60 persons, and doing business of $100,000 per annum. The business was established in 1865. R. A. Peck is President; Almon Wade, Treasurer; and E. L. Eaton, Agent of this company.

N. C. BRIGGS, manufacturer of carriages, occupies a three story wooden building 120x30 feet, located at Nos. 334 and 336 High street. He commenced business in 1856, and now gives employment to 20 persons, turns out annually about 125 carriages, and does a business to the amount of $25,000.

THE PROVIDENCE LITHOGRAPHIC CO. are located at 127 Friendship street, formerly at 257 Westminster st. Their removal furnishes them with new facilities to satisfy their patrons. They make a specialty of labels and color printing, in which they rival larger cities.

C. C. POTTER & CO. occupy a room 33x56 feet, in the brick building, located at 51 Friendship street, for the manufacture of electro-plated jewelry. They commenced business in 1828, and employ 20 persons. The firm is composed of C. C. Potter and J. E. Potter.

S. W. HARTSHORN occupies a room 30x95, in the second story of brick building, located on Summer street near Pine, for the manufacture of hoop skirts, tape and bed binding. He commenced business in 1860. Employing 12 persons; running 9 looms, 1 winding machine, and 1 warper; turning out about 18,000 yards weekly,

D. F. ADAMS & CO. occupy the 4th story of brick building located at No. 18 North Main street, 45x115 feet, for the manufacture of paper bags. They employ 11 persons and have facilities for producing 5,000 bags per day of various sizes, and do business amounting to $20,000 per annum.

W. R. RICHARDS, manufacturer of electro plated jewelry, occupies the 2d story of wooden building 50x30 feet, located at No. 53 Friendship street. He commenced business in 1865. Employs 18 persons, and does business amounting to $18,000 per year.

DODGE & RATHBON, manufacturers of gold jewelry, occupy a room 30x40 feet, in 4th story of brick building situated at No. 51 Friendship street. Established, 1866. They employ 7 persons, and do business amounting to $18,000 per year.

HARRIS & CO., occupy a 2 story wooden building 40x90 ft. situated at No. 127 Friendship street, for the manufacture of all kinds of plain and fancy boxes and jeweler's cards. They commenced business in 1865, and now employ 25 persons. They use up one hundred reams of paper annually, and in 1867, made about 500,000 paper boxes of various sizes and cut over a million of jewellers cards. They do a business of about $12,000 per annum. This firm make a specialty of making fancy paper boxes in which they are largely engaged.

JOHN CARPENTER, manufacturer of doors, sash, blinds and mouldings, occupies the lower floor 35x100 feet of a 4

ORION W. COE,

MANUFACTURER OF

HYDRAULIC CEMENT,

Drain and Sewer Pipe.

Manufactory on Beach street, (between Park and Holden sts., near the River,)

PROVIDENCE, R. I.

story wooden building, located at No. 28½ Smith street. He commenced business in 1868, and has 10 employees. The machinery used consisting of 3 moulding machines, 1 planer, 2 circular and 2 jig saws, 1 sash sticker and groover, 1 rabbitting machine, 1 side jointing machine, 1 power mortiser, 2 tenoning machines, 1 boring machine, 1 blind slat machine, and other smaller machinery is driven by an engine of 35 horse power, supplied by steam from 2 cylinders boilers 40 horse power combined, built by the Providence Steam Engine Co. of this city.

YATES & KING occupy a 3 story wooden building 60x40 feet, situated on Gaspee street, near the foot of Francis, and manufacture pine, chestnut and walnut chamber sets of a superior quality and finish. They commenced business in August, 1868, and have 7 employees.

ORION W. COE, manufacturer of hydraulic cement pipe, for draining and sewerage purposes, occupies a 1½ story wooden building 95x80 feet, with the necessary yard room used for storing and drying, situated on Beach street, between Park and Holden, near the Woonasquatucket river. He employs six persons, and has a capacity for turning out 400 feet of pipe per day, of various sizes.

These sewer pipes, made of hydraulic cement and gravel, which will stand the most severe test, are extensively used in this city, New York, Brooklyn, Albany, Troy, New Haven, Hartford, Springfield, Central Park, Navy Yard, &c., &c., and adopted by eminent hydraulic engineers are especially adapted for sewerage, sink drains and conductors of water in cities and villages, conductors under street crossing, railroad embankments, &c. Also for blow pipes, well sides, chimneys, &c. Important recommendations are, cheapness and durability. They are easily and quickly laid, forming a perfect joint. He claims that their perfect smoothness gives them a capacity of at least 30 per cent. over brick, stone or wood sewers of the same size, and prevents them from collecting sediment from sink or other drains.

THE LAURELDALE CHEMICAL WORKS, situated in North Providence, was established in 1845 by T. P. Shepard & Co., and are now owned and conducted by them. They consist of numerous buildings used for the purpose of manufacturing oil of vitriol, of which 300 carboys per day can be produced. Four steam boilers are used, two plain cylinders and two Harrison globes. About 40 men are employed. The chief articles of consumpton are brimstone, coal and saltpetre. Their office is at No. 12 North Main street. These works have recently been enlarged.

ALBERT DAILEY & Co. and A. M. HAWKINS & Co., manufacturers of doors, sash, blinds, boxes, &c., occupy a 3 story brick and wooden building 120x65 feet. Also, as an office, storeroom and glazing shop, a 2 story wooden building 125x35 feet, located at No. 270 Dyer street. They also have, in connection with their manufactory, a large lumber yard, covering about 4 acres of ground, where they keep constantly on hand a varied assortment of lumber of different kinds. The business was established about 1825 by Messrs. Tallman & Bucklin, at which time Mr. Dailey acted as their clerk. Awhile after, it came into the hands of the preseut firm, who have, on an average, 75 employees. Their machinery, consisting of 4 large planers, 4 moulding machines, 1 sash machine, 2 power mortising machines, 2 foot mortising machines, 1 patent blind style borer, capable of boring 4,000 holes an hour, 2 tenoning machines, 1 slat tenoning machine capable of tenoning 15,000 slats per day, 1 blind slat planer, 1 sash sticker, 1 groover, 1 boring and 2 turning lathes, 2 slat machines for driving staples, 1 slat mortiser capable of mortising 600 slats per hour, 1 swing saw for cutting lumber, 2 jig saws, 1 shaping machine for sticking all kinds of mouldings, &c., 1 rod machine for making rods from ⅜ inch to 2 inches diameter, 1 cutting off and splitting saw and 5 saw tables. Their machinery is driven by an engine of 65 horse power of the Corliss pattern, built by Wm. A. Harris, of this city, supplied with steam from 3 cylinder boilers, built by the Providence Steam Engine Co., of this city.

DAVID LESTER occupies the lower floor and basement of a three story wooden building 250x75 feet, located at Nos. 112 and 114 Dorrance street, where they manufacture coffee, spices, cream tartar, &c. The business was commenced in 1857. In 1860 he commeuced grinding by steam power, at 45 Clifford street; and in January, 1869, removed to his present locality, and roasts 2,000 lbs. of coffee, daily, doing business of $100,000 per annum. Power furnished from engine in building adjacent. Store, No. 168 Westminster street.

THE PERKINS SHEET IRON CO., capital $150,000, occupy a building 200x160 feet, a machine shop 80x40 feet, with out buildings, &c., covering four acres of ground, and located on Sprague street. They have in use nine furnaces for melting scrap and pig iron, 1 set of Burden squeezers, 3 set of rolls, and 1 set of sheet rolls, and produce daily, 4 tons of finished sheet iron and 18 tons of billets, and have 60 employees. Their machinery is driven by an engine 270 horse power, Noble T. Greene's patent, built at the Builders' Iron Foundry, of this city supplied by steam from eight boilers, built by the Providence Steam Engine Co.. also of this city. They also have an engine of 30 horse power, used for driving blowers, built by Gifford & Houghton, of Fall River, Mass. William Sprague, is President; C. H. Perkins, Agent; R. W. Comstock, Secretary, William Groves, Foreman of this company.

RHODE ISLAND HORSE SHOE CO. Capital $150.000, oc-

FERDINAND MITH,

Providence, R. I.

329 High Street.

Manufacturer of

DR. HICKS' ARNICA SALVE,

Smith's Oriental Hair Restorer,

—AND—

SMITH'S ARNICA

COURT PLASTER.

Also manufacturer of

FINE CIGARS,

329 HIGH STREET,

PROVIDENCE, R. I.

cupy 2 buildings one 100x60 feet; and one 170x40 feet with outbuildings, &c., covering 3 acres of ground, located on Sprague street. They manufacture horse shoes, employing 90 persons. They have in use 6 furnaces, 30 punching machines, 4 horse shoe machines, and 3 sets of rolls, and produce daily about 15 tons of horse shoes. Run 2 steam engines, Noble T. Green's patent, 110 horse power combined. Supplied by steam from 2 cylinder boilers, all of which were built by the Providence Steam Engine Company of this city. William Sprague, is President; Charles H. Perkins, Supt. and William Groves, foreman of this company.

COMSTOCK FOUNDRY. Incorporated 1869. Capital $30,000. Occupy a moulding room 80x40 feet; melting room 22x16 feet, and a warehouse 80x32, 2 stories, with outbuildings, &c., covering about 40,000 square feet of land and located on Sprague street, where they employ 25 persons in the manufacture of every description of light and heavy castings. Have in use 3 McKenzie cupalos, and melt 3 tons of iron per day. C. H. Perkins, is President; R. W. Comstock, Secretary, and E. E. Lapham, Foreman. Their motive power is derived from the "Wilcox Caloric, and Steam Engine Company's works," in building adjacent.

THE AMERICAN HORSE NAIL CO., capital $80,000, occupy a building 80x40 feet, located on Sprague street, and employ 25 persons. Run, when in full operation, 6 machines, and produce 1 ton of nails per day. Their power is received from the works of the Perkins Sheet Iron Company in building adjacent. Isaac Southwick is President of this company.

THE WILCOX CALORIC & STEAM ENGINE CO., incorporated in 1867, Capital $100,000, occupy a building 200x40 feet, and carpenter shop 20x30 feet, the whole covering about 30,000 square feet of ground and situated on Sprague street. They employ 30 persons, and manufacture the Wilcox Patent Portable Engines with cast iron sectional boilers. An engine of 20 horse power, of their own make, furnish impetus for their machinery. William Sprague is President, C. H. Perkins, Agent, R. W. Comstock, Secretary, and Frank Pearce, foreman of this company.

THE RHODE ISLAND BRAIDING MACHINE WORKS, located at 89 Aborn street, were established in 1865. Their main building is 70x40 feet, three stories, with a boiler house 20x35 feet. They manufacture machinists work in most of its branches making a specialty of braiding machines and such other machines as are used in the manufacture and preparation of Braids, including singeing machines, hankers, braider tables, shafting, pulleys, &c. They employ 25 persons and consume annually 100 tons of castings. Every endeavor is made by this company to keep their machines up to the highest mark of improvement, introducing from time to time such changes as a thorough experience dictate. The manufacture of Dress Braids, fourteen years ago unknown in this country, has grown to such an extent as to do away with importation of this class of goods. The machinery used in the manufacture of the above is driven by an engine of 45 horse power, "Tisdale Carpenter's patent cut off," built at the Phenix Iron Foundry of this city; supplied with steam from two cylinder boilers, 50 horse power, built by the Providence Steam Engine Company of this place.

WE always admire tact and enterprise, when coupled with financial ability and practical ideas. In connection these remarks refer more particularly to FERDINAND SMITH, Esq., 329 High street, who is probably one of the largest manufacturers of cough tablets in New England. His success as a practical chemist and compounder of valuable medicines, is realized more forcibly by the public in the production of this valuable cough alleviator, of which he manufactures and sells over half a ton yearly. He also manufactures Smith's Arnica Court Plaster and Smith's Oriental Hair Balm Restorer. His laboratory is located at 303 High street, where he also manufactures fine cigars in great variety, for his own and other first class trade. He employs 8 persons, producing about one-fourth of a million cigars annually.

L. F. JOSLIN, manufacturer of doors, sash and blinds, occupies two floors in a four story brick building, located at 82 Orange street, and employs 10 hands. He commenced business at Manton, R. I., and a while after, removed to his present locality. The machinery, consisting of 2 planing and 2 tenoning machines, 1 sash machine, 1 boring machine, 1 power and 2 foot-mortising machines, 1 slat plainer, 1 irregular cutter, 1 rod machine, and 4 saws, is driven by an engine in the works of Henry Blundell & Co., in building adjacent. Office, 118 Broad street.

J. B. & S. S. SWEET & Co., occupy a three story wooden building 50x45 feet, with a wing 20x20 feet, and an engine house 30x18 feet, for the grinding of salt, dyewoods, &c., and located at from 16 to 22 Charles street. The business was established by Sweet & Angell, in 1849, and carried on by J. B. & S. S. Sweet, until 1869. Their machinery—among which there are three run of stones—is driven by an engine of 40 horse power, supplied with steam from a 40 horse power flue boiler, both built by the Corliss Steam Engine Co., of this city. This firm is composed of Jesse B. Sweet, Smith S. Sweet, and Jesse B. Sweet, Jr. Do business to the amount of $60,000 per annum.

PROVIDENCE RIVET CO., incorporated in 1856, with a capital of $20,000, occupy a 2 story brick and wood building 35x67 feet, with out buildings, &c., located on Cold Spring street, near Central Bridge, and manufacture iron and turned rivets of all sizes, employing on an average 6 persons. Run 5 riveting machines, capable of producing 1,000 pounds of

CORLISS STEAM ENGINE CO.,

Providence, R. I.

Incorporated 1856. Manufacturers of

STEAM ENGINES

—WITH—

CORLISS' PATENTED IMPROVEMENTS.

—o—

This Company were awarded the First Gold Medal at the Paris Exposition, 1867, for the best

STATIONARY STEAM ENGINE.

—o—

Boilers, Mill Gearing & Iron Castings

FURNISHED AT SHORT NOTICE.

GEORGE H. CORLISS, President, WILLIAM CORLISS, Treasurer.

rivets per day. An upright engine of 15 horse power, furnished with steam from a flue boiler 25 horse power drive their machinery. William Knowles is Treasurer of this Company.

Franklin Manufacturing Company Union Mills occupy a brick and wood mill 3 stories and attic 122x80 feet with a wing 70x33 feet, located at Olneyville, near the city line, and manufacture 57½ inch silesias 64 square No. 3 harness and 28 inch print cloths 64 square. Run 110 looms on silesias, 50 on print cloths and 8,504 spindles, and consume annually about 832 bales of cotton, producing 1,811,680 yards of cloth, and employing 110 persons. Their machinery is driven by an engine of 120 horse power, supplied with steam from 6 cylinder boilers 30 feet long and 30 inch diameter, built by the Corliss Steam Engine Co. of this city. They also have an Upham water wheel 11 horse power and a Fall River wheel 49 horse power, built by Kilburn & Lincoln. Amos D. Smith & Co., No. 5 South Water street, are Agents and W. V. Rounds, Superintendent of this company.

The following manufacturing companies have an office at No. 56 Westminster street of this city, the mills being in different parts of the surrounding country.

The Ashland Co., James Y. Smith, Treasurer; James Y. Smith & Nichols, Agents; occupy mills at South Scituate, R. I., for the manufacture of 46x58 sheetings, yard wide. They run 5,028 spindles. Water power.

The Scituate Manufacturing Co., James Y. Smith, President and Treasurer; James Y. Smith & Nichols, Agents; occupy one mill containing 9,000 spindles, at Scituate, for the manufacture of print cloths. Water power, 24 feet fall. Have two mills at this place at present unoccupied.

The James Y. Smith Manufacturing Co., James Y. Smith, President; C. A. Nichols, Treasurer, and James Y. Smith & Nichols, Agents; occupy a mill in this city, run by steam power, containing 7,680 spindles, for the manufacture of the celebrated "Elmwood," 100x100 sheetings. The mill was constructed in 1867 for the especial purpose of making the very best possible quality of goods. The fabrics produced have been exhibited abroad and pronounced to be not only the best specimens of American manufacture, but superior to anything of the kind produced in England or France. They may well feel proud of a compliment paid them in the shape of an order from Liverpool for a shipment of the "Elmwood" shirtings of their manufacture. A specimen of these goods exhibited in Manchester, England, was pronounced by the manufacturers of that city superior to similar English fabrics, and the results of the exhibition was the order mentioned above.

The success of the experiment will lead probably to an extension of the exterprise and the production of the finer fabrics which have hitherto been imported.

The American Screw Co.'s stock is considered to be the best paying stock in the market. The establishing of this concern met with many reverses, discouragements and disappointments. Many interesting incidents in connection with the owning of stock, &c., &c., are related. Persons having this stock could find no one to take it as a gift. It was a complete drug. Within a short time the stock went up and soon above par, and on to paying immense dividends. Persons who were struggling with the world found themselves suddenly rich. A poor blacksmith, hammering at the anvil, was found to be a millionaire, and now eujoys a larger cash income than any one in Rhode Island. Such were the fluctuations of success with this as is the case with most prominent inventions. We quote from Bishop's History: "The manufacture of wood or gimlet pointed screws,

is practically a monopoly in the United States. It is carried on by but one company, whose principal establishments are in this city, where screws were first made by machinery about the year 1834. The company had its origin in the consolidation of the companies previously engaged in the manufacture, the two principal ones being the Eagle and New England, and its success is due to the fact that it virtually controls the best machines which have as yet been invented for cutting screws, having purchased nearly 50 patents of inventions, designed to facilitate the manufacture, including all the important ones that have been made in England. This company has about 650 machines, which have a capacity for making 14,000 gross of screws per day or 4,200,000 gross per year. It employs on an average 600 hands, 300 male and 300 female, to whom $24,000 are paid monthly as wages. The value of screws made per year exceeds a $1,000,000. Over 3,000 tons of iron are consumed in the factories annually, and the trimming or chips average 3 tons per day.

The word "Silver," thanks to the war, now seldom suggests pockets and the jingling of coin as it did years ago, and consequently people generally do not realize the immense quantities of the precious ore now consumed. The quantity of silver annually produced is of almost fabulous worth. Much of this is used for coin, but a very large proportion is used for plate. A few years ago, and when plate was spoken of, Europe was immediately suggested, with gay capitals, courts, and banquets; for in America comparatively little was in use. Now plate means America as well as Europe. The statistics of trade in this country show a steady and rapid increase in the use of silver plate. Our merchant princes use it as lavishly as the court princes of the Old World. A very large proportion of the plate annually produced in this country is purchased for marriage presents. It is not so very unusual an occurrence for a bride to be presented with silver of the value of from $15,000 to $20,000. We could cite a recent case in New York city, where the bride received presents in silver valued at nearly $20,000. At a silver wedding in Pittsfield, Mass., not long since, a wedding for which the happy pair had a house expressly built, silver ware of the value $30,000 was presented.

In Europe the use of silver ware for the household is more confined to the wealthy classes; in this country there are comparatively few families too poor to possess some articles of the precious metal. As the country has grown prosperous so have the middle classes advanced, and with that advance, indulged in the luxury of plate. Whatever this may betoken we leave to the political economists to say, but the fact remains that, in this free land, silver is more universally used for household service than in an other country on earth.

With the increase in the consumption of silver in this country we have made steady advance in the art of working it. We wish in this place to make no comparison between the art in Europe and the art in America; for since the days of Benvenuto Cellini, Europe has boasted its great silver working artists, and to-day some of these artists give to the world beautiful fabries. But whatever the condition of the art in Europe, the tact remains that it has made less progress there during the last fifty years than on this continent. In American designs, the modern predominates; in European, the antique and mediaeval. The American designer in part gives the spirit of the living age; the dead past is revived by the Europeans. We believe much of the improvement made in the art of silver working in America is due to the GORHAM MANUFACTURING COMPANY, of this city, and therefore we will call attention to what they have done, and are doing. We give a brief sketch of the history of this company, as it in part illustrates the more recent history of the art in this country and its relations to the country's trade.

The founder of the Company was Mr. Jabez Gorham, who established himself in business here in 1831. He died a few months since, having lived to see a large flourishing establishment grown up around him. The firm confined itself to the manufacture of pure silver ware. Gradually the business increased till it had assumed large proportions. After several changes in the firm it at last became a joint-stock corporation, under the name of Gorham Manufacturing Company, the son of the founder being its president. The manufacture of large articles in silver was begun in 1851; in 1852 the present head of the firm went to Europe, and again in 1860, for the purpose of gaining all possible information in the working of silver. He visited the most celebrated silver manufactories in Europe. In France, in England, in Germany, he studied to know what could be done for the addance of art in America. He imported costly machinery; he collected a library of works of art; he procured the services of the best European and American artists.

The pushing Yankee, always sagacious, is never more so than when he spies an opportunity to excel his competitor in trade by the introduction of improved implements and machinery, or by paying liberally for experiments in scientific applications which promise to increase the market value of his wares. He who first fixes the attention of the public by a novel design combining ornament with utility, may safely count upon a degree of success amply repaying his expenditure and means.

Having gained success in this field, the Company in 1863 turned its attention to the manufacture of silver plated goods. There was a great demand for an advancement in this branch of the art. For this, one of the firm visited Europe several times. The best foreign and American machinery was secured. Some of this machinery was very costly; for instance, some of the rolling machines introduced weigh over twenty tons. Ten stamps are used, some of them having hammers weighing from one ton and a half to two tons each.

After two years of preparation, the machinery was finished, and in 1865 the plated ware was put upon the market.

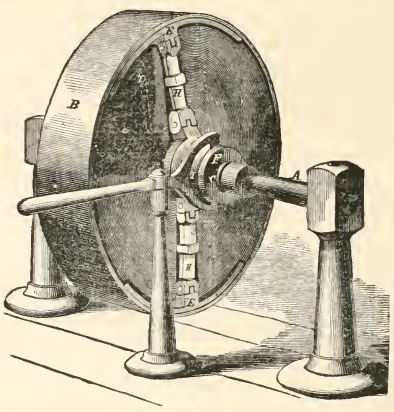
The expectations of the Company were fully realized. They were successful in their new enterprise, and to-day the silver plated ware of no manufacturing company in the world stands higher than does theirs. One distinguishing feature of this Company is, that it is self-sustaining, having shops in which is done all the designing, modeling, pattern-making, chasing, casting, rolling, etc.: also, carpenters' shop, and shops where tools and machines are manufactured and mended.

This company has recently enlarged their buildings and capacity, taking in and occupying a whole square. They have 5 cylinder boilers, 21 horse power each, built by Kendall & Roberts of Cambridgeport, Mass.; also, 2 Harrison boilers, 110 horse power each, and an 80 power Corliss engine. Employ about 400 persons who are really doing the work of a thousand, so completely is the establishment furnished with labor saving machines.

That the Gorham Manufacturing Co., has done much for the business prosperity, needs no proof; and that they have done much for the art features of the business to which they have devoted themselves, needs only this attestation,—that their wares have been used as models by English manufacturers.

VOLNEY W. MASON & Co. occupy a building 50x50 feet, two stories, with wing, situated on Lafayette street, for the manufacture of friction pulleys. They commenced business about nine years since; employ 15 persons. A 30 horse power engine, made by Providence Steam Engine Co., supplies the power.

VOLNEY W. MASON & CO.,
Manufacturers of
PATENT FRICTION
Clutches,
Also Shafting, Gearing and Machinery,



Providence, R. I.

We quote from Bishop's History:

"The Providence Machine Co., Thomas J. Hill, proprietor, is one of the most extensive and complete establishments in New England for manufacturing cotton and woolen machinery. Although it might be supposed, from its title, to belong to a company, it is the property of one individual. The main buildings are of brick, three stories in height, and present an appearance, externally, that is very imposing. The main machine shop is 220x60 feet, with another parallel to it, 200 x36 feet; the two being connected together in the centre. There is also a foundry 80x60 feet; a pattern shop, 95x26 feet, and storehouse and other buildings, covering in all an area of about 5 acres. In these buildings are produced annually a half million dollars' worth of machinery used in cotton and woolen mills, especially roving machines, including the various kinds of fly frames, slubbers and speeders, self-acting mules, spinning frames, copper dresser rolls, and spindles.

"Mr. Hill, the proprietor of these works, is one of the few men who have rendered important service to America, by aiding to make her independent of England and other countries in her supplies of cotton machinery. He was born in Pawtucket, R. I., in 1805, and served his apprenticeship as a machinist with Pitcher & Gay, of that town, and remained with them and their successors until April, 1830. He then removed to Providence and entered the employment of Samuel Slater, the pioneer of cotton spinning in America, taking charge of his machine shop, which was located on the first floor of the Providence Steam Cotton Mill, on Eddy street. During the first year, he received as compensation the sum of one dollar and fifty cents per day. He commenced his second year on a salary of $900, which continued until the spring of 1834; when was formed the copartnership of the Providence Machine Co., composed of Mr. Slater and Mr. Hill, the former furnishing the room and power, the latter his services and skill. This arrangement continued even after the decease of Mr. Slater, and, with some modifications, until 1846, when Mr. Hill, having accumulated a capital of nearly $50,000, purchased the old Stonington depot, and erected the building which is now his principal machine shop. He also purchased the tools of the Providence Machine Co., and commenced business under the style of the old firm.

"Mr. Hill, during his youth, was remarkable for his great physical strength, and his capacity to execute work with astonishing rapidity. After others were fatigued and worn out with their day's labor, he was as fresh and vigorous as one of his own trip-hammers. He has a natural genius for mechanics, and his judgment respecting new machines, and improvements in machinery, has been so uniformly accurate that many things have been thrown to the scrap heap at his suggestion; and it is said nothing that his judgment condemned has ever made its way in the world. As an expert in machinery, he has few superiors; and it is a common remark among manufacturers, when a new improvement is brought to their notice—'Has Mr. Hill seen this? what does he say about it?'

"The distinguishing quality that has given him eminence in his department of mechanics, is that he always commenced his labor on a machine with the highest conception of perfection his knowledge had attained, and kept all parts of the work up to this standard. Instead of gradually coming up to his own notions of perfection, it was just there he began. In this way, he made every machine with such thoroughness and completeness, that nothing was left to be done till another advance has been made in the invention.

"On one occasion, he was employed to construct a certain piece of machinery. He ordered his pattern-maker to furnish the patterns. When they were brought to him for his appro-

GEO. E. SHERMAN, President. WM. H. SHERMAN, Agent. J. G. STOWE, Treasurer.

EUREKA WRENCH COMPANY,

COVE STREET, PROVIDENCE, R. I.

We would respectfully call the attention of all who have occasion to use a Wrench, to the following described tools;

FIG. 1.

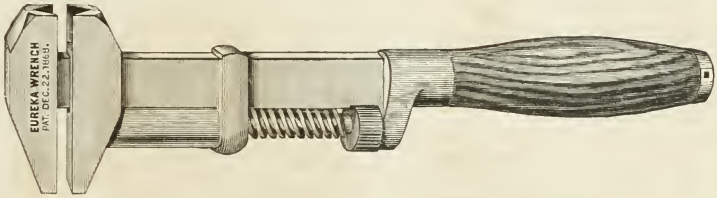


FIG. 1 combines the ordinary Screw, with an Axle, or Carriage Nut Wrench, for which we claim the following advantages over all others:

1st. Greater Strength, the Shank being wider and thicker than the ordinary Wrenches, which prevents springing, and is forged from the best of Wrought Iron of size 2x1.

2d. The Double Thread on the Screw, which facilitates the opening and shutting of the jaws.

3d. The Ferrule, which has double bearings inside, is put on under great pressure, and is also held in place by a hardened steel pin, which prevents any liability of moving and bending the adjustable screw, so common on all other wrenches.

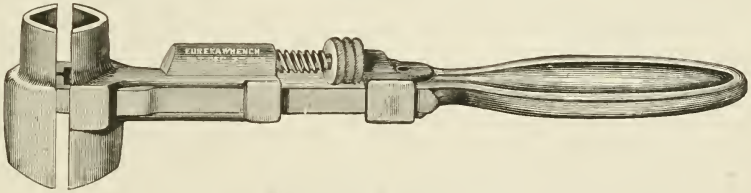
4th. The Patent Angular Jaws placed where a hammer is usually found, (which hammer is detrimental to any wrench, as hammering bends the shank and prevents the working of the screw. These jaws will remove any size axle nut, to the whole capacity of the Wrench, without removing the Wrench, or having it slip off, as is always the case; the nut remaining in the Wrench can be returned to its place. The jaws are also adapted to removing all nuts either square or hexagonal. The material and workmanship are first class; the parts are all thoroughly case hardened and interchangable, are subject to close inspection, and we claim a better made and finished Wrench than any yet introduced.

We have spared no pains to make this Wrench meet the wants of mechanics, and claim that they will out wear any Wrench yet introduced, and thereby save expense to the purchaser. We invite inspection and challenge comparison.

We do not make what is usually called Black Finished, but we well polish and then case-harden like Gun Finish. If polished afterward, we made an addition in price.

1 Case of 10 in. contains 6 doz. 1 Case of 12 in. contains 6 doz. 1 Case of 15 in. 4 doz. Polished $2 extra.

LIBERAL DISCOUNT TO THE TRADE. [FIG. 2.]



A NECESSITY SUPPLIED.

Fig. 2 represents an Axle Nut Wrench, (of which we make two sizes,) adapted to the use of Carriage Makers and owners of Carriages, and will also be found a useful tool in the hands of any mechanic. It will remove either square or hexagonal nuts, as follows:—14 inch size from ⅜ to 2¼, and 24 inch size from 1⅜ to 3¼.

They are particularly desirable for Railroads, Ship Builders, Steamboats, Livery Stables and Teamers, as one Wrench takes the place of the many wrought iron ones usually used. They are made of a superior quality of Malleable Iron, finely finished with Wrought Iron Screw, and handsomely enameled.

Please give us your orders for the best Wrenches in the world. ☞For sale by all Hardware Dealers.

One Case of 14 inch, contains 6 dozen. One Case of 24 inch, contains ½ dozen.

SHERMAN & COMPANY,

— MANUFACTURERS OF —

IMPROVED MACHINISTS' TOOLS,

Of the Finest Workmanship and Material, with all the Modern Improvements,

Cove street, opposite Stonington Railroad Co.'s Repair Shop, Providence, R. I.

ALBERT F. ALLEN,

MANUFACTURER AND DEALER IN

FIRE
Department Supplies,

Including ALLEN'S PATENTS, consisting of

ESCAPE VALVE COUPLING,
IMPROVED SCREW COUPLING,
SPRAY NOZZLE, IMPROVED WRENCH, &c., &c.;

SOLE PROPRIETOR AND MANUFACTURER OF THE MORSE PATENT SCREW COUPLING.

—o—

Agent for the

GRENOBLE HEMP FIRE HOSE; METROPOLITAN RUBBER & RUBBER-LINED LINEN HOSE,

Each guaranteed to stand a pressure of 300 lbs. to the Square Inch;

GATES & SONS' LEATHER HOSE;

Boyd & Son's LEATHER HOSE & Boyd's Patent COTTON HOSE;

Davis' Patent Double Leather Hose.

—o—

Sole Agent for Rhode Island for

Mayo's Laminated Water Sewer and Gas

PIPES,

Impervious to Water, Air and Gas, and more durable, stronger and cheaper than cast iron pipe.

I furnish everything, from a

Hose Wrench to a Steam Fire Engine.

—:o:—

Prompt attention paid to Orders, which are especially solicited.

Friendship, corner Eddy Street, - - - - Providence, R. I.

(RECENTLY REMOVED FROM 184 EDDY STREET.)

THE PROVIDENCE PRESS COMPANY,

PUBLISHERS

— AND —

BOOK AND JOB PRINTERS,

— PUBLISH —

The Providence Evening Press,

Daily, Three Editions.

The Evening Press is Republican in politics; contains all the latest Foreign and Domestic News by Telegraph and Ocean Cable; Daily Stocks, Gold, Commercial, Marine; Cotton, Wool and Print Cloth Reports of Providence and New York.

The Evening Press is a First-Class daily paper, of Large Circulation, and a superior medium for Advertisers.

Terms, $8.00 Per Annum.

The Rhode Island Press

IS PUBLISHED EVERY SATURDAY.

Terms, - - - - - - - - - $2.00 Per Annum.

BOOK AND JOB PRINTING.

The Providence Press Co. have superior facilities for First-Class Book and Job Printing, of every description. The type and machinery are all new, of the most modern and approved make. They have the largest and best appointed office in the State; new Presses, of the latest and most approved patterns, and of the largest size. These, with superior workmen, insure to our patrons First-Class Work and an early delivery of their orders.

The Press Company have been *Printers to the State* for years.

Counting Room, 16 Weybosset St., - - Printing Office, 37 Custom House St.,

PROVIDENCE, R. I.

THIS WORK WAS PRINTED AT THE ABOVE OFFICE.

val, they were inferior to his conception of perfection. The pattern-maker thought they 'would do.' 'That is not my standard,' he exclaimed, and stamped the pattern to pieces. The result was, that no pattern was again presented for approval that simply "would do." On another occasion, when certain machinery of great value had been completed, which operated imperfectly in some of its parts, he is said to have caught a sledge hammer and broken it in pieces with such determined will and heavy blows, in the presence of foremen and laborers, that ever afterward they understood the emphasis which he put upon the proper working of a machine.

"Mr. Hill has amassed a large fortune, is President of the Lime Rock National Bank, and connected with many of the public institutions of the city and State, as director and otherwise, and has a high reputation for honor and integrity throughout the community."

We quote from "Bishop's History," to which we are indebted for many valuable statistics, as well as for much other valuable information:

"On March 10th, 1849, we find in the Patent Office Reports, that a patent was granted to Geo. H. Corliss, of this city, for an improvement in the steam engine. Such an announcement is usually the epitaph, as well as the introduction of an invention, and as the improvements in steam engines which have been patented exceed a thousand (169 having been patented in a single year,) the fact that any one of them is remembered at all, is in itself evidence that it possesses more than ordinary value. The works of the Corliss Steam Engine Co. are among the most prominent of the many manufacturing establishments of Providence. They are, with the Providence Tool Co., which are adjacent, the first objects of attraction to passengers entering the city by railroad from Boston and Worcester. They were built during the years 1848, '49 and '50, and occupy an area of nine acres. The machine shop alone covers about an acre of ground, being 608 feet long with an average width of 70 feet. The boiler shop, smith shop, iron and brass foundries are all spacious and well equipped with tools. In their aspect and especially in the interior arrangement, these buildings present a marked contrast to works of a similar description, being light, cheerful and comfortable, a circumstance that not only imparts pleasure to visitors but conduces to the health of the workmen employed."

The Corliss Steam Engine Company was incorporated in June, 1856, capital $300,000, with a present capital of double that amount. Its officers are George H. Corliss, President; Wm. Corliss, Treasurer, and John H. Clarke, Agent.

The reader in perusing our work will find many manufacturing establishments using the Corliss Engine.

The Providence Press Company have one of the largest and best appointed printing establishments, with every facility for letter printing, printing in colors, and first-class book and job printing of every kind. On the 31st of December 1868, the office of the Company was entirely destroyed by fire, the workmen barely escaping with their lives. Within a period of three months from the day the fire occurred, work was resumed in their new, convenient and commodious printing rooms, having double their former capacity and facilities for printing. The type and machinery are all new, and it is the intention of the Company to equal in typographical excellence, the work of the best printing establishments of the country.

Over sixty persons are regularly employed in the newspaper and book and job printing departments, and their capacious building is a hive of busy industry. In connection with their printing rooms and under the same roof, is the first class Book Bindery of H. M. Coombs, thus offering every convenience for book publishers to secure a finished book. The Press Company are thus offering facilities long needed in the State, and it is gratifying to know that this enterprise is appreciated and that their orders are equal to their utmost capacity for executing them. This volume is a specimen of their work, having been printed upon their superior mammoth, double-medium book press, and finished at the bindery of Mr. Coombs.

The Press Company publish the Providence Evening Press, a Republican daily paper of large circulation, and the Rhode Island Press, a weekly paper for country circulation.

The American Butt Company. Situated at 420 Broad street, was established in July 3d, 1844, by Henry C. Pabodie, and has ever since been in successful operation, and has steadily increased its facilities for production until at the present time, the works cover about 35,000 square feet of ground—bounded on three sides by Broad, Pearl and Lockwood streets,—and employs when in full operation, about three hundred hands, who manufacture 5000 dozen of butts per week, besides castings of various descriptions, more particularly the best kinds of light castings. An engine of 50 horse power furnishes the impetus for the machinery.

The company was incorporated in July, 1868, with a paid up capital of $100,000, and the privilege of increasing it to $300,000.

The late President, Henry C. Pabodie, the founder of the Works, died in October, 1868. His nephew, B. Frank Pabodie, is now at the head of the Corporation, as Treasurer.

Messrs. Benjamin M. Hubbard, and Stephen O. Randall who have been connected with the company for many years, have control of the manufacturing department.

This Company, with the New England Butt, also situated in Providence, manufactures the majority of the cast butts made in the United States. The American Butt Company have warehouses in New York, Boston, Philadelphia, Baltimore, New Orleans, and Chicago, and is one of the well known, reliable and long established manufacturing companies which make Providence noted as a manufacturing city.

The Fletcher Manufacturing Co. have one of the largest and most imposing manufacturing structures in the city of Providence, though their productions are designated by the modest term of "small wares." There are 2 factories, both comparatively new, and tastefully and ornamentally constructed of pressed brick and cut stone. One of these buildings is 184 feet long and 64 feet wide, and 5 stories in height, with a bleachery and dye house attached of the same width and 123 feet long. The machinery in this manufactory is propelled by an engine of 350 horse power. The other building is 144 feet long by 47 feet wide, and also 5 stories in height, with a store house and finishing shop attached, 110 feet long, 35 feet wide, and 2 stories in height. The machinery in this building is propelled by an engine of 150 horse power. These factories contain 18,000 spindles, and turn out daily 2,500 lbs. of cotton yarns, 750,000 lbs. yearly, which are manufactured into lamp wicks, boot, shoe and corset laces, crotchet and plain braids, and other similar small wares. The machinery is much of it of a novel description, and the words—"No admittance"—have more significance on the doors of this establishment than ordinarily.

The works are operated by a company, incorporated in 1865, with Thomas Fletcher, President; Henry Fletcher, Secretary and Agent, and John S. Ormsbee, Treasurer. This company are the successors of Thomas Fletcher, who, in 1793, commenced the manufacture in a small way of lamp wicks, tapes and webbing. After his decease, in 1824, the business was carried on by his two sons, Thomas and William, under the firm-style of T. & W. Fletcher. Another

PROVIDENCE

BLANK BOOK

MANUFACTORY,

(Over Press Co.'s Office,)

No. 37 CUSTOM HOUSE STREET,

H. M. COOMBS, PROPRIETOR.

BLANK BOOKS MADE TO ORDER.

ALSO

BOOK BINDING,

IN ALL ITS BRANCHES.

☞ This Book was Bound at the above establishment.

brother, Joseph, was soon after admitted, and the style was changed to Fletcher Brothers, who added the manufacture of corset laces to their original business, and employed two small machines. In 1827, they embarked in the manufacture of boot and shoe laces, of which the production is now enormous, and from year to year enlarged and increased the capacity of their works, but without a change in the firm-style until 1860, when, by the admission of sons as partners, it became Fletcher Brothers & Co., which continued until 1865, when the Fletcher Manufacturing Co. was incorporated.

Thomas Fletcher, the late President of the company, was born in Boston, Mass., in 1798, but was a citizen of Providence from 1809 until his decease in 1867. The business, which came into his hands upon the death of his father, in 1824, was then so small, and carried on with machinery and appliances so inefficient, compared with those now employed, that he may be called the founder of the present establishment, whose immense structures are a monument to his persevering industry, commercial sagacity, and well-directed enterprise.

At the present time, Joseph Fletcher is President of the company.

SHERMAN & Co., commenced the manufacture of machinists' tools, in September, 1868, as successors to Prentice, Sherman & Co., who were formerly located at 72 Pine street. Their new brick building is 140x45 feet, with engine, boiler room and blacksmiths' shop attached, 33x37 feet. They employ 20 persons in the manufacture of lathes, of which they make a specialty. These lathes combine several patent improvements peculiar to this establishment, and for accuracy of workmanship and material, they claim they are surpassed by none. They have just commenced the manufacture of a patent screw wrench called the Eureka, which they propose to turn out at the rate of 100 per day. It is particularly desirable for owners of carriages, railroads, ship builders and mill men generally. This firm consists of young, enterprising and withal practical men. William H. Sherman, formerly of Prentice, Sherman & Co., George E. Sherman, now Superintendent Smithfield Manufacturing Company, Dedham, Mass., and James G. Stowe, late Secretary of the Rhode Island Locomotive Works and Treasurer of Perkins Sheet Iron Company of this city.

BOON, RICE & Co. are extensive dealers and sole agents in this city, for the Forest River Lead Co., Hall, Bradley & Co., and Brooklyn white leads, and for Peter Cooper's lubricating neats foot oil. Besides these, they deal extensively in drugs, chemicals, paints, varnish, window glass, glue, and painters and manufacturers' supplies.

DARLING, BROWN & SHARPE, 139 South Main st. This establishment are manufacturers of United States standard rules, patent hardened cast steel try squares, the American standard wire gauge, and a variety of other tools for accurate measurement; employ 130 hands, and have an engine of 25 horse power. This firm made a display of their articles at the Paris Exposition, 1867, and a silver medal was awarded them. Also, in connection, the BROWN & SHARPE MANUFACTURING COMPANY, manufacturers of sewing machines, revolving head screw machines, universal milling machines, tapping machines, &c. This establishment is largely engaged in manufacturing the Wilcox & Gibbs sewing machines, of which they have made 75,000.

THE PROVIDENCE STEAM AND GAS PIPE CO. added to their works during 1866, a new brick building, corner of Pine and Eddy streets, 160x45 feet, and four stories in height. This company was incorporated in 1850, and is the largest manufactory of steam and gas-fittings in the State; its excellent work is also appreciated throughout New England and the West, in gas-works for towns and manufacturing establishments.

ALBERT F. ALLEN is manufacturer of and dealer in every description of Fire Department supplies. He occupies a room 50x45 feet, in a 3 story wooden building 184 Eddy St.,

THOMAS PHILLIPS & COMPANY,

COPPERSMITHS AND PLUMBERS,

MANUFACTURERS AND DEALERS IN

Copper Drying Cylinders, Color and Dye Kettles, Copper Piping, Copper Baths and Wash Boilers, Copper, Brass and Iron Force and Lift Pumps, Water Closets, Bath Tubs, Wash Basins, Brass and Silver Plated Cocks, and Block Tin Pipe, Washing Machines,

CENTRIFUGAL WRINGERS AND DRY ROOMS FOR LAUNDRIES,

Lead Pipes and Sheet Lead, and Bolt and Sheet Copper constantly on hand.

75 TO 85 SOUTH MAIN STREET, PROVIDENCE, R. I.

and is the only establishment of the kind in the State. He commenced business June 3d, 1868. Employs at present 6 hands, making everything used in a fire department. He has had several patents granted him for improved spray nozzels, wrenches, escape valves, couplings, &c., &c. He has constantly on hand, hose of every description, and is agent for the celebrated Greenoble & Odorless Rubber Co.'s hose and Mayo's patent wooden pipe for water gas, &c., a cheap and superior article for the purpose required. Mr. Allen, although having been established but a little over a year, has "pushed" his business into nearly every manufacturing village of New England as well as to the great cities of the far west.

Lonsdale Co. The mills belonging to this company are situated at Lonsdale and Ashton, on the Providence and Worcester Railroad; the office being at 34 South Main street, of this city. The company was incorporated in 1834. Goddard Bros., Agents. Their mills number six: containing 112,000 spindles, employing about 3,000 persons. They manufacture fine bleached goods, silesias and jaconets. No. of yarn, 38 to 60; width of goods, 35 to 40 inches. Use 10 Fall River turbine wheels, from 7 feet 4 inches to 9 feet diameter, and three Corliss engines, 250 to 300 horse power. The fall is 23 feet.

Hope Co., Goddard Bros., Agents, was incorporated in 1845. Number of spindles, 26,000. No. of yarn, 31 to 35; three wooden breast and iron wheels, and one Corliss engine of 90 horse power, supplies the power for the machinery. About 500 hands are employed. The mills of this company are situated at Hope Village, R. I., reached from River Point Station, R. I.

Goddard Bros. are agents for the Blackstone Manufacturing Company, situated at Blackstone, Mass. (See Blackstone.)

The Hope File Works 51 Friendship street. William R. Hopkins, proprietor, is engaged quite extensively in the manufacture of hand cut files. The works were established several years since and employs about 15 persons.

The House of Sprague started with Amasa Sprague, the grandfather of Amasa and William, the present representatives of the house. He was succeeded by his sons, Amasa and William, and thus, the firm of A. & W. Sprague come into existence. At the death of the "Old Governor," as William Sprage, the uncle of the "two boys," who now control the house of A. & W. Sprague, is generally called even now, the business had not yet assumed anything like its present giant proportions. That event occurred in 1856, and there were at that time only six calico printing machines in the print works at Cranston. Since then, however, not only has addition after addition and extention after extention been put to the works, until the mills form an extensive village in themselves, but every species of improved machinery has also been procured and set in motion.

The operations on the farm exhibit the same energy which has been displayed elsewhere. From 250 acres of cultivated land it has been increased to nearly 1200 acres, laid out in beautiful fields, large gardens and orchards. The Narragansett Park is located in this tract, the account of which will be found on page 440.

Instead of six-color machines, the highest number any machine was capable of printing at the death of the "Old Governor," there are in the works at Cranston, to-day, machines which print 12. Their are now 36 machines in the works, and 50,000 pieces of cloth can be printed and finished in a week. This immense establishment is driven by six engines varying from 40 to 300 horse power, and the consumption of coal per day is not short of 100 tons. Twenty-five donkey engines are scattered over the establishment to do special duty wherever needed. Trimming machines, washing and drying machines, dyeing apparatus, engraving machines, all the immense and complicated machinery necessary to the manufacture of the material for a new dress. The villages where the operatives reside are built after a uniform model, and consist of story and half double houses. In the store at Cranston, an immense business is done. The Spragues do their own slaughtering, and kill about 25 head of cattle per week, and sheep and hogs in proportion. The meat is furnished to their operatives four or five cents per lb. cheaper than it can be bought in the Providence market, and the "store" sells goods of every kind at a proportionately low figure, the sales in a single year amounting to $400,000. In the works here, 2,000 hands are employed, besides those engaged at their other mills.

The Morgan Mill, situated near the Print Works, is built of stone and contains 4000 spindles, for the manufacture of carpet warp. Here 50 persons are employed. One wheel and a 40 horse power engine supplies the power. The fall is 18 feet.

At Natick, on the Providence, Hartford and Fishkill Railroad, are four mills, built of stone and brick, for the manufacture of print cloths 72 square, 28 inches wide. Run 42,000 spindles, 1000 looms and employ 800 persons.

Arctic Mill, near River Point, on the Providence, Hartford and Fishkill Railroad, is built of stone, contains 25,000 spindles, 600 looms. Employs 450 persons, manufacturing 28 inch print cloths, 64 square. They employ 450 persons. A turbine wheel furnishes the power. The fall here is 28 feet.

At Quidnick, on the Providence, Hartford & Fishkill Railroad, they run 2 stone mills, known as Nos. 1 and 2.

Recent improvements will increase their capacity, to 30,000 spindles, and 750 looms. Employ 750 persons, manufacture 28 inch print cloths, 72 square.

At BALTIC, on the Providence, Hartford and Fishkill Railroad, they occupy the largest mill in the United States. It is built of stone and is 946x88 feet, 5 stories. Here are run 76,000 spindles, 2000 looms. Employing 1200 persons, and manufacturing print cloths and sheetings 72x72 and 76 x76. Six wooden wheels supply the power. The fall is about 38 feet.

At Central Falls, they run a flax and cotton mill under the style of the United States Flax Manufacturing Company. This mill has recently been enlarged. They run here 30,000 spindles and 700 looms, manufacturing 32 inch lawns. Yarn, 60 warp and 80 filling, 76 square. Flax machinery also is run to quite an extent.

The Spragues have also mills at AUGUSTA, ME., the account of which will be found under the head of Augusta, page 34.

They consumed 17,000 bales of cotton the last year, and within five months they have bought at least 10,000,000 yards of cloth from other manufacturers and printed it in their own works at Cranston.

The officers of the A. & W. Sprague Manufacturing Co. are: William Sprague, President; Amasa Sprague, Treasurer. Principal office, No. 3 Exchange Place, of this city. Selling Agents: Hoyt, Spragues & Co., New York and Philadelphia.

THOMAS PHILLIPS & CO., occupy a building 80x80 feet, 2 stories, situated at 75 to 85 South Main street, for the manufacture of every thing appertaining to the business of Coppersmiths and Plumbers. They manufacture as specialties, chemical apparatus for laboratories, and copper work for print works, steamboats, and steam pipes, dye kettles, color kettles, lead acid kettles for cleansing wire; plumbing mills, public buildings, private houses, laundry machinery, &c. The business was established by Thos. Phillips, in 1830, and they employ 60 persons. The many manufacturing concerns in and around Providence, and the rapid growth of the city, have contributed much to the success of this establishment, which is one of the oldest, largest, and most complete in Rhode Island.

NOYES & BROS., manufacturers corn cakes, are now located at 64 and 66 Richmond street, instead of 35 Richmond street.

HUNTSVILLE WOOLEN MILL. The above mill is owned by Messrs. Sayles & Walden, situated in the village of Pascoag on the Clear river or Wallum Pond stream, about 15 miles from this city, west, is used in the manufacture of fancy cassimeres; building 105 feet long, three stories high with basement, ell attached 100 feet long, two stories high with basement; other buildings required for the purpose of manufacturing connected with the mill; capacity, four sets machinery, twenty looms; use 3,000 lbs. wool per week, produces 3,000 yards cassimeres per week. Employ sixty-five operatives; one tubular horizontal boiler; excellent water power; Tyler wheel thirty-six inch diameter. The location is pleasant and healthy, being the highest or first privilege occupied on the stream. The supply of water is abundant, fully two-thirds of it running to waste each year. The mill is now leased and operated by J. A. Walden.

QUIDNICK, 13 miles from Providence, 77 from Hartford, a manufacturing village owned mostly by the A. & W. Sprague Manufacturing Co., who occupy two mills at this place, known as No. 1 and No. 2. They are built of granite, are in every respect model mills. This company are now putting in new machinery and preparing to make finer goods. No. 1 mill has 16,240 spinples, 404 looms, 68 picks 66 reed, manufacturing 28 inch wide cotton goods. Number of hands employed 200. The engine of 300 horse power was made by the Providence Steam Engine Co. of Providence. No. 2 mill has 10,320 spindles and 250 looms, same size and quality of goods as in mill No. 1. Hands employed 150. The mills are on the South branch of the Pawtuxet river, and have 23 feet fall, using at present 18. An increase of their works in the fall will necessitate the using of the whole.

RICHMOND, 30 miles from New London, 32 from Providence, on the Stonington and Providence Railroad, a small manufacturing village, of about 200 inhabitants.

CHAS. CLARKE & CO. own a mill at Clarke's Mills, one quarter of a mile distant from the above depot, for the manufacture of cotton warps. The mill is built of stone, 2 stories 84x46, employing about 25 persons, turning out about 3,500 lbs. of warps per week, and using 10 bales of cotton; the motive power is furnished by a wooden wheel 14 feet in diameter, 16 feet long. Their post office address is "Shannock."

GEORGE WEEDEN, occupies 2 mills, known as "Shannock Mills," located near the above depot, one building 104 x52 stone, 2 stories with attic; another 55x26, 2 stories and attic, wood, for the manufacture of plaid lindseys and cotton warps, turning out 9,000 yards lindseys and 9,000 lbs. cotton warps per week. Mr. Weeden formerly manufactured cotton cloth, commencing business in 1850. The motive power of these mills is furnished by a bucket wheel, the fall being 12 feet. This manufactory is located on Charles river, a branch of the Pawcatuck, runs 2 sets of woolen machinery, and 2000 cotton spindles.

RICHMOND SWITCH, 26¼ miles from New London, 36¼ from Providence, 152 from New York and 80 from Boston. A country station on the Providence & Stonington Railroad.

RIVER POINT, 11 miles from Providence, 79 from Hartford, on the Providence, Hartford and Fishkill Railroad. The manufacturing villages reached from this depot are, Centreville, 1 mile; Crompton, 1½ miles, to the south; Lippitt, Phenix, Harrisville, Arkwright, Hope, Fiskville, and Jackson, from one half to two miles to the north and north east. River Point is a thriving manufacturing village; contains two churches and two stores.

PEARCE BROTHERS are located at Phenix, a thriving village about one mile from the depot. A village containing several stores, one or two churches, &c. The above firm was established in 1865, for the manufacture of woolen yarns. Their main building is 80x40, two stories; dye house, 30x 24, one story; dry house, 30x24, one story; office, 20x12. They employ 18 persons, run 1,000 spindles, consume 6,000 lbs. of wool per month; 2 over-shot, 24 and 16 feet wheels, supply the power.

In the same village is the LAMPHEAR MACHINE CO., successors to Levally, Lamphear & Co. The present company was incorporated July, 1867, for the manufacture of cotton machinery, gearing, shafting, &c. The business was established in the year 1837—the main building is 120x40 feet, 3½ stories, stone and wood, with an addition 56x46, three

stories; forging shop, 50x40, one story; lumber house, 44x 36, two stories. They employ 80 persons. A turbine wheel supplies the power, assisted by a 35 horse power Providence Steam Engine Co.'s engine, when needed.

Centreville Woolen Mills, located at Centreville, are owned and run by James Waterhouse. Manufacture fancy cassimeres; employ 100 hands; run 8 sets cards; produce 5,000 yards goods per week. The machinery is driven by a water wheel of 100 horse power, under 16 feet head and fall.

The Crompton Manufacturing Company, located at Crompton village; Post Office, Centreville. The business was established in 1806, with a capital of $300,000. They manufacture print cloths, and employ in the mill 340 hands and about 300 in the print works. They use 375 looms and 16,100 spindles, making 350,000 yards of cloth per month, and consuming 145 bales of cotton in the same time. The motive power is furnished by 1 breast and 1 iron wheel; a steam engine of 125 horse power, to be used when short of water, and 6 cylinder boilers. The village contains 1,100 inhabitants.

Cooper & Phillips, manufacturers of machinists tools, pumps, iron, copper and brass work generally; occupy a main building 38x25 feet, two stories; another 28x24, 3½ stories, at Crompton, about 1½ miles from the depot, employ 16 persons; an 18 feet breast wheel supplies the power. The business was established in 1866.

L. & J. H. Brayton, iron founders and machinists, occupy a building originally 45x90 feet, lately enlarged one quarter. Employ 25 persons.

Nathan Monroe, machinist, established 1864; the building is 100x40, three stories, stone, employs 6 men, runs a 160 horse power Corliss engine, with two flue boilers.

Searle's Corner, 7 miles from Providence and 83 from Hartford. A country station in the town of Cranston, on the Providence, Hartford & Fishkill Railroad.

Slocumville, 39 miles from New London; 23 from Providence, on the Stonington and Providence Railroad. A country station. A small mill is situated here, run by E. & H. Babcock, of Westerly, R. I.

Summit, about 20 miles from Providence and 70 from Hartford. A country station in the town of Coventry, on the Providence, Hartford & Fishkill Railroad.

Tiverton, 53¼ miles from Boston, and 4¾ from Fall River. A station and town on the Old Colony and Newport Railroad. Located on the Narragansett Bay. A substantial stone draw bridge 1000 feet long unites it with Newport. The surface of the town is varied by hills and valleys. Its structure is granite and the land in some parts is stony. The soil is principally a gravelly loam, and capable of producing good crops.

Valley Falls, 6 miles from Providence, 37¼ from Worcester. A manufacturing village on the Providence & Worcester Railroad. Population about 1,200.

Valley Falls Co., Samuel B. Chase, Agent and Treasurer, occupy 3 mills,—two of 3 stories and one of 4 stories, for the manufacture of print cloths and 4-4 sheetings, turning out about 75,000 yards per week; employing about 300 persons. Water power.

The Abbott Run Co., I. N. Kibbee, Agent, occupy a brick building 50x60, 3 stories, with basement, and wooden mill adjoining, 100x40, for the manufacture of print cloths, employing 60 persons, and running 3,000 spindles, 82 looms, making 16,500 yards per week. C. Allen & Co., Agents, 47 North Main street, Providence, R. I.

Vue de l'Eau, 3½ miles from Providence, on the Providence, Warren & Bristol Railroad. A summer resort of the citizens of Providence. A large hotel is situated here. The grounds border on Narragansett Bay.

Warren, 10½ miles from Providence, on the Providence, Warren & Bristol Railroad; the road to Fall River branches off here. Warren has a safe and commodious harbor for vessels of 300 tons burthen. Ship building is pursued here to some extent. This place has produced a great number of excellent sailors and ship-masters, as well as ship builders. The village is delightfully situated on a rise of ground fronting the harbor; it is neatly built and is surrounded by a variety of interesting scenery. A fine summer resort and much frequented; contains several churches, banks, &c. &c.

Warren Manufacturing Co., incorporated 1847, capital $300,000, J. O. Waterman, Treasurer. They occupy two mills for the manufacture of cotton, containing 32,000 spindles, employing about five hundred hands, consuming 3,000 bales of cotton, and 2,600 tons of coal per annum, producing 5,000,000 yards of sheetings and print cloths. The works of this company, have recently been enlarged by the erection of an addition to the new mill of the same size of the old structure. The capacity of the works is increased about 25,000 spindles, by this improvement, the expense will be paid with the past earnings of the mills. The whole number of spindles is now about 57,000, with the proportionate increase in the number of employees as well as the production.

Bowen & Co., oreide and plated jewelry manufacturers, commenced the busines as successors of George C. Franklin, who is one of the company, in September, 1868. They occupy a second story of a building 60x23 feet. Employ 9 persons, and do a business of about $35,000 per year.

The Eagle Manufacturing Co., successors to C. R. Cutler & Company, who commenced business in 1861, in a 2 story wooden building 110x48 feet, manufacturing cotton yarns and warps. In 1868 a new brick building was built, 3 stories, 164x64 feet with a large tower in the front-centre and a boiler house in the rear 40x50 feet. The power is furnished by one of Wright's patent 150 horse power engine, built by the Washington Iron Works, of New York, with nine 30 inch cylinder boilers. This company employ 200 persons, making 3,500 lbs. per day; running 7,000 spindles and using up 2,000 bales of cotton per year. This manufactory is located near the depot and can be seen from the cars, which pass directly in front of it. Being of modern architecture and substantially built, it is one of the most imposing buildings in the village, contributing much to its wealth and population.

The Inman Manufacturing Co., this company was incorporated in 1867 with a capital of $100,000. John S. Fenner, Agent and Treasurer, Joseph McCarthy, Secretary. They occupy 1 main building 130 feet in length, 2 stories

with 2 ells 60x30 feet in length respectively; also, 2 stories for the manufacture of cotton braids, shoe and corset laces. They have a capacity for 150 workmen; they use 600 patent American braiders, producing 4,500 lbs. or 9,000 gross per week. The works are driven by one of Wilcox & Babcock's patent engines, built by the Hope Iron Foundry, of Providence, 30 horse power with two 30 inch, 30 feet cylinder boilers. The New York office of this company is at 20 Maiden Lane, Boston office, 89 Franklin street.

WASHINGTON, 14½ miles from Providence, 75½ from Hartford. A manufacturing village on the Providence, Hartford and Fishkill Railroad. One manufacturing concern is situated here.

WESTERLY, 18 miles from New London, 44 from Providence, 144 from New York, 88 from Boston and 6 from the Atlantic ocean, at the head of navigation on the Pawcatuck river. The Indian name for this village and town is Misquamicut, located on the Stonington and Providence Railroad. The river is navigable for vessels to the village, of 40 and 50 tons. A small steamer plies during the summer months between this place and "Watch Hill," a famous summer resort, where are located several first class hotels, which are liberally patronized by the citizens of our larger cities. Westerly, is a very wealthy enterprising and rapidly growing place of about 5,000 inhabitants, containing 4 or 5 churches, 4 banks, 2 weekly newspapers, and one of the most substantially built, elegantly furnished hotels in the United States, erected by Babcock & Moss, a manufacturing firm of this place, and opened to the public in 1868. It is dedicated to the memory of the Dixon family and called the "Dixon House."

MANUFACTURERS.

COTTRELL & BABCOCK, established in 1855. Manufacturers of machinery in general, principally woolen machinery and printing presses. Their machine shop 70x80, 3 stories, foundry 75x50, 1 story and blacksmiths' shop 30x85, 1 story, pattern house 30x40 feet, 2 stories and store house 30x50, 2 stories. Employ 150 men, consume 500 tons cast iron 100 tons wrought iron and 200,000 feet lumber annually. This firm produced last year about $150,000 worth of goods, which were shipped to different parts of our country, also to Canada and South America. Their machinery is driven by a 45 horse power engine.

STILLMAN BROS. & CO. succeeded J. P. Stillman & Co. in 1858, who commenced in 1842. They manufacture wood working machinery, planers and brass roller shives. They employ 25 persons, and occupy a room 40x48 and another 20x24. Power furnished by Stillman's turbine water wheel.

BABCOCK & MOSS occupy two mills at Stillmanville, one quarter mile north of the depot, for the manufacture of cassimeres and cottonades, one being of 3 stories, the other 2½ running 8 sets on cassimeres and 8 on cottonades. Employing 350 persons, making 20,000 yards of cottonades and 6,000 yards cassimeres per week, using 7,500 lbs. of wool per week for cassimeres.

The machinery is driven by three of Stillman's turbine wheels and a 90 horse Corliss engine, patent and make, using 5 tubular boilers, made by Hicks, of Providence. This company also run another mill in the south part of the village, near the river, formerly occupied by Campbell & Co. It contains 9 sets for cassimeres, run by a 90 horse Corliss engine and make, with 6 tubular boilers, making about 600 yds. per week.

O. M. STILLMAN occupies a four story brick mill 100x48, built in '48, for the manufacture of cassimeres; employing 100 persons, running 6 sets of woolen machinery and 36 looms, turning out 6,000 yds. per week; using up 5,000 lbs. of clean wool per week. The power is furnished by Stillman's turbine wheel and a 25 horse power engine built by the Putnam Machine Company, of Fitchburg, Mass. The pay roll amounts to $3,500 per month. The average wages per month, for males and females, $35. This manufactory is located about one-quarter of a mile north of the depot, on the Pawcatuck river. There is also in conection with this manufactory 2 wooden buildings, 2 stories each, 150x30, and 40x70, used for dye house, wool sorting and fulling out. The details of this concern in under the charge of J. R. Scott, Superintendent.

E. & H. BABCOCK, commenced the manufacturing business in 1844. They now occupy 2 mills at Potter's Hill, built in 1847, 4 miles north of Westerly, one of them 3 stories, built of stone 54x108 feet, the other, 3 stories, built of wood, about 40x80 feet. They employ 110 persons, manufacturing flannels, using 8 sets of machinery, 100 looms and turning out about 15,000 yards per week. The mills are run by water power, using a United States iron water wheel. The selling Agents are Sutton, Smith & Co., 85 Worth street, New York. This company run a small mill at Sloeumville.

WHITE ROCK MANUFACTURING CO.—This company occupy a mill built in 1849, at White Rock Village, one mile north of the depot, for the manufacture of roll jaconets and fine shirtings, 4 stories, brick, 180x50, employ 150 persons, running 10,000 spindles, 224 looms, using 15 bales cotton per week; the average production being 2,700 yards per week. The motive power is furnished by a French turbine water wheel and one U. S. wheel; the fall being about 8 feet. The mill is located on the Pawcatuck river, with walks tastefully laid out in front of the building, a fine grove on the grounds add a pleasant aspect to the surroundings. A village of 16 houses is located directly opposite. This company have taken great pride in making this place the pleasantest and neatest manufacturing village in New England, and we say that they have done so, a striking contrast with some other villages owned by less enterprising proprietors in New England. The rules of the mill are so arranged as to insure neatness and order unexcelled; and we venture to say that the finest dressed persons can visit this manufactory and not fear of soiling their garments, as the mill is kept in perfect order in every detail. This company also run 2 woolen mills in the centre of the village of Westerly, one built of stone. 60x40 feet, 3 stories and attic, the other of brick, 60x25, 5 stories. They employ 45 persons in these two mills, manufacturing Lindsey's, the weekly production being 1,680 yards. There are 6 set of cassimere machinery now standing, 3 of them running for 44 Lindsey looms. A new mill is now in course of erection, to be 3 stories high and about 100x48, with a dye house 24x48. This new mill is situated adjoining the others, and is designed for six sets of machinery, including 30 cassimere looms that are not now in operation. The new mill will probably be in full operation in the fall of 1869. Babcock & Moss are agents for the company.

WICKFORD, 42 miles from New London, 20 from Providence, on the Stonington and Providence Railroad. The village is situated 2¼ miles from the depot on an arm of the Narragansett Bay, has quite a good harbor, having a number of vessels engaged in coasting. The village contains 2 churches, 2 banks and about 16 stores. Located 168 miles from New York, and 64 from Boston, in the town of North Kingston.

An enterprise is now projected for the purpose of bringing the city of Newport in more direct communication with Wickford and the Shore Line Railroad, making a more direct route to New York, and avoiding Point Judith, by a branch road being built from the depot to the village 2¼ miles, which borders on Narragansett Bay, there to connect with a steam ferry boat for Newport. Nothing definite has been decided as yet, in regard to the matter.

S. A. Edmonds & Co., purchased of one Mr. Chapin, in 1867, this mill then known as "Shady Lea," but now as Allenton Mill. Fancy cassimeres are made here, of which about 4,000 yards are made per week. The main building is 80x48 feet, 3 stories, brick, with L, 3 stories, 30x100 ft. The engine house 40x80 feet, contains a Corliss engine, 60 horse power, made by W. A. Harris, 14 inch cylinder, 32 inch stroke, with 4 cylinder boilers, a dye house attached is 36x50 feet, and a machine and blacksmith shop, 1 story.

Anaquatucket Company took its name from the small river on which it is situated. The estate is owned by the heirs of Ezbon Sanford and leased by the company, who own the machinery and manufacture cotton warps. S. H. Vaughan is Treasurer. The business was established in 1855, and the building is 1 story and attic, 100x32 ft. The mill has 1,300 spindles, and is run by a Collins improved enameled turbine water wheel and an engine, built by Campbell & Whittier, 40 horse power, with Corliss return flue boiler. This mill is one-half mile from Vaughan and Greene's mill on the same river.

Vaughan & Greene occupy two mills two miles from Wickford Village, and four miles from the depot, situated on the Anaquatucket river, near the Narragansett Bay. They manufacture cotton warps and yarns. This business was established in 1849, by the Hamilton Company, and were succeeded by the Vaughan Bros. in 1856, who continued till the death of O. and T. B., when the surviving partner S. H. formed a partnership in 1866, with J. A. Greene. The old original mill was 40x34, 2 stories and attic. It has been rebuilt and enlarged to 115x34. In 1866, a new mill was built by the present firm 100x18, two stories with attic, the whole works built of wood. They have a dye house and picker room attached, the former 60x25, the latter 60x18. They run 3,000 spindles and have 24 webbing looms, 100 braiders and 1 set of silk machinery. The average production is 3,600 lbs. per week of cotton fabrics. Employ 45 males and 60 females. The average wages for the males is $1.75 per day, females $1. The power is furnished mostly by water with a Collins improved turbine water wheel, which Mr. Vaughan reports as having given great results in the time he has had it. They have also an engine built by W. A. Harris, Corliss' patent 60 horse power, which they use when short of water. They use 4 cylinder boilers with Miller's patent attachments, besides 1 Wilcox patent boiler, for heating the mills which are furnished with heating pipes throughout. Quite a number of houses surrounding for the homes of the operatives, makes the village have a neat appearance.

At Belleville, near Wickford depot, are J. P. Campbell & Co., manufacturers of fancy cassimeres; occupy a brick mill 100x48 feet, 3 stories and attic, with L 40x60 ft. 2 stories and attic. Also, a dye, wool and boiler house 60x50 feet, 3 stories. They commenced business in 1865, have 100 persons employed; run 6 sets of cards, and produce on an average 20,000 yards of cloth per month, doing a business of $400,000 per annum. A 45 horse power engine, built by Providence Steam Engine Co., of Providence; also 2 breast water wheels 50 horse power, drive their machinery. They occupy 2 privileges from North and South Belleville ponds. Office, No. 6 South Water street, Providence, R. I. R. H. Wilson, Superintendent.

Woonsocket, 16¼ miles from Providence, 27 from Worcester, and 38 from Boston, situated on the Providence and Worcester Railroad. This enterprising village has about 9,000 inhabitants and is rapidly increasing. It comprises nearly the whole town by the same name, the same being set off in 1867 from Cumberland and Smithfield, the towns adjoining. Many improvements have been made here for the past few years. Numerous private residences and public buildings erected, among which, are the Masonic Hall, Harris Block, Fletcher's Block, Roman Catholic Cathedral, &c. The Air Line Railroad is built as far as this place, connecting with Boston four passenger trains daily, and same number with Providence and Worcester, by the Providence and Worcester Railroad. The village contains seven churches, six national and three savings banks, and a weekly newspaper, "The Woonsocket Patriot."

MANUFACTURERS.

The Lippitt Woolen Co.'s buildings cover a lot of land 200 feet square, run 18 set of machinery. A 125 horse power Corliss engine, with four 5 feet tubular boilers; employ 250 persons. A 175 horse power Jonval turbine water wheel with 15 feet fall.

The company use the best American and imported machinery, A. J. Elwell, Superintendent. Office, 37 Weybosset street, Providence, R. I. (See Lippitt Woolen Co., Providence, R. I.)

Edward Harris occupies 3 mills on Main street, for the manufacture of woolen goods. The mill known as No. 2, is 50x90, 5 stories, built of stone with ell 36x44, 2 stories, with engine boiler and dry house attached, also, an assorting room, 62x39, 2 stories and basement. Mill "No. 3" is 50x100, 5 stories. "No. 4" 50x104, 4 stories in front and six in rear, with wing, 77x50 in front and 6 in rear, also, added a wooden mill 40x30, 2 stories. They run 24 set of woolen machinery making fancy cassimeres, &c. Employing 550 persons. One Leffel 48 inches and 2 breast wheels, with a 125 horse power Corliss engine, with 6 boilers, furnish the power for the works. Use 750,000 ponnds of American wool and produce 520,000 yards of cloth per annum. Mill "No. 5" is used as a cotton mill, situated on the same street, 50x100, 4 stories in front and 6 in the rear, built of stone. Run 6300 spindles, 140 looms. Employ 130 persons; consume 675 bales of cotton, and produce 1,100,000 yds of ⅞ and 4/4 sheetings and drillings. A 40 horse power Corliss engine furnishes the power for the mill, in connection with 1 breast wheel, the fall here being 14½ feet.

S. A. Aldrich & Son commenced the manufacture of print cloths in 1864, occupying a mill building 100x60 feet, At the time of commencement they run only 40 looms, now they have 86, and give employment to 40 hands. Their machinery is driven by an overshot wheel, 24 feet, with 18 feet bucket.

James P. Ray occupies a mill 50x60 feet, 5 stories, for the manufacture of yard wide sheetings, located in the western part of the village on Main street. The mill has about 3,000 spindles, 50 looms. The monthly production of the mill is 45,000 yards, consuming 15 bales of cotton. The power is furnished by a Leffel turbine 90 horse 4 feet water wheel, the fall here being about 17 feet; employs 50 hands.

The Woonsocket Rubber Co. was incorporated in May, 1867, with a capital of $100,000. Lyman A. Cook, President, Joseph Banigan, Agent. Their works are located on the Main street, opposite George C. Ballou & Son's mill, the main building, built in the shape of an L, is 44x162 feet, part 2 stories and part 3 stories, with numerous out buildings adjoining. They manufacture rubber boots and shoes, flock clothing, wringing machine rolls, &c. Employ 115

persons; the motive power is furnished by a 100 horse power engine, built by the Hope Iron Works, with 4 boilers.

GEORGE W. MILLER & Co., occupy the lower floor of a building 60x30, for the manufacture of machinery, commencing here in 1866. The machinery used, consists of 9 lathes, 1 upright drill, 1 planer, 1 boring mill, 1 gear cutter, 1 slabbing machine. The motive power is furnished by a 10 horse power engine, built by this company. They employ 8 persons, and do a business of $12,000 per year.

GEORGE C. BALLOU & SON, (David,) commenced the manufacture of print cloths in 1852, the father commencing many years before, in this village occupying a mill 136x48, built of stone, 4 stories high, with wing 60x46, 5 stories. Additions have been made from time to time, one 50x44, 2 stories. The motive power is furnished by a 24 feet breast wheel, the fall being 20 feet. In the summer, steam power is used, furnished by a 100 horse Woodruff & Beach engine with 3 boilers. In 1863, this mill was changed to making fine sheetings, still continuing. The mill has 11,008 spindles, 232 looms, and employs 175 persons, consuming 20 bales of cotton per week, turning out 36,000 yards. In 1864, they purchased the Globe Mills situated across the river, in the town of Springfield, the main buildings being of stone 80x44, 4 stories and 100x48, 5 stories respectively, with numerous additions of wood. A new mill is now in course of erection, designed to be 232x68, 5 stories, with a wing 200 x56, 3 stories, with addition 150x50, 4 stories, the old buildings to be removed. The mill will have 30,000 spindles. The present mills employ 175 persons; use 5500 pounds of cotton and turn out 14,000 yards of light print cloths per week. This mill has 9000 spindles and 200 looms. Wm. B. Card, is the Superintendent of both mills, having been with this company since 1863. Office in Providence, 41 Weybosset street.

THE UNION WORSTED CO., Cook & Stafford, proprietors. Commenced the manufacture of alpacca and mohair braid in Oct. 1868. They occupy one room in the Woonsocket Iron Foundry building. The intention is to enlarge the works. They are running at present 60 machines made by the Rhode Island Braiding Machine Co. Employ 12 persons.

J. N. MASON & Co. occupy a main building 40x30, 2 stories with wing 36x24, 1 story; another 18x40, 1 story with shed, &c., attached, for the manufacture of soap. The business was established in 1837, by J. N. Mason. In 1863, Stephen N. & Joseph N. Mason were admitted. They employ 10 persons, the monthly production being 100,000 lbs. A 25 horse power engine with one tubular boiler furnishes the power for the works.

O. S. FULLER & Co. commenced the manufacture of spools and bobbins, in Feb. 1868, as successors to Chase, Clark & Co. They occupy the lower floor of a building 50 x100 feet; employ 15 persons and do a business of $1,500 per month.

WM. INGRAHAM commenced the manufacture of boilers and tanks in May, 1868, as successor to McGee & Sutliffe. Employ 10 persons, occupying 2 buildings 24x32, one story, and 32x43, one story respectively. The works are located nearly opposite Harris's new mill.

A. BURGESS & SON occupy one room. 37x14, on 3d floor of Fletcher's block, on Main street. A branch of their establishment in Providence, commencing here in 1860. Employ one man. J. P. Congdon, Agent.

POND'S WARP MANUFACTURING CO., Daniel B. Pond, proprietor, Eli Pond, Agent. The works are located on Bernon street. The main building is 50x120, 3 stories, built of wood, with picker engine, and dye house, built of brick adjoining 30x40. The power is furnished by 2 Tyler water wheels, the fall here being 8 feet. In addition, a 60 horse power Campbell & Whittier's engine with 2 boilers. These works employ 100 persons, consuming 4,000 pounds of cotton per week, the production being $8000 worth of warps. Balmoral skirts are also made here, producing 3500 skirts per month. This business was established in 1850 by the present proprietor.

THE GROTON MANUFACTURING CO. occupy a stone mill near the Providence and Worcester Railroad, 200x42, four stories, with ell 75x52, one story. Run 10,000 spindles, 202 looms, consume 20 bales of cotton, and produce 39,000 yds. of 39 in. sheetings. A Kilburn, Lincoln & Co.'s wheel furnishes the power for the works, the fall being 14½ feet.

AQUILLA COOK commenced the manufacture of brushes in Woonsocket, in 1855; employs 10 persons.

THE WOONSOCKET IRON FOUNDRY, S. S. & B. M. Cook, proprietors, occupy a building 200x50, 4 stories, built of stone, with French roof, used as a machine shop, a foundry 125x40, 1 story, in which are employed 8 persons. The power is furnished by 2 water wheels, 1 breast and 1 turbine, the fall being 16 feet. They employ 50 persons; they make Paul's self-operating mule, besides Hayward's patent folder and trimmer. This firm commenced here in January, 1868, the business being established by Willis & Lyman A. Cook, some twenty-five years ago.

ARLINGTON COTTON MILLS, H. A. Stone, Agent, occupy a mill 100x80, 4 stories, built of stone, run 4,000 spindles, 56 looms, employ 40 persons, consume 250 bales of cotton per year, the production being 10,000 yards of 38 inch sheetings per week. A 20 feet breast wheel supplies the power for the mill. Commenced here July, 1868.

THE CLINTON MANUFACTURING CO., was incorporated in 1854, with a capital of $120,000. James T. Rhodes, Treas., E. R. Thomas, Agent. The business was established by James T. Rhodes and others. The mill is situated in Clinton village, a part of the village of Woonsocket, being 250x50 feet, 5 stories, stone, with addition 73x36 feet, 1 story, with engine and boiler house attached, in which is a 125 horse power Corliss engine, with three tubular boilers, which furnishes the power for the mill in connection with 2 breast water wheels, 24x16 and 22x16 respectively; also 1 Collins 6 feet 9 inch turbine water wheel; the fall here is 14½ feet, the water coming from the Blackstone river through a trench. This mill has 16,000 spindles, 336 looms, employ 225 persons. Consumed for the year previous to Oct. 1st, 1868, 738,351 pounds of cotton, and produced in the same length of time 2,733,116 yards of sheetings.

THE WOONSOCKET COMPANY, Crawford Allen, Treasurer, occupy 4 stone mills, in the village of Bernon, in the town of Smithfield, but really a part of the village of Woonsocket. The first mill was built in 1829. This company run over 11,000 spindles, 288 looms. Employ 250 persons, consume 20 bales of cotton, and produce 60,000 yards of print cloths per week. Four breast wheels furnish the power for the mills, the fall being 16 feet; the water is brought to the mills through a trench leading from the Blackstone river. All of the mills are 4 stories.

OSCAR J. RATHBUN occupies 2 mills at Jenksville, a small village, a part of Woonsocket. They are 65x36, 3 stories, with basement, 65x36, 4 stories, respectively. Run 3820 spindles, 80 looms. Employ 60 persons, manufacturing 13200 yards of ⅞ shirtings per week. The power is furnished by 2 wheels, 1 breast 26x5½, and 1 Leffel 55 horse power water wheel. The water is fetched through a trench from Peter's river, the fall being 24 and 26 feet. The mills were built in 1829, and about 1818. R. G. Burlingame, Superintendent.

The Bailey Washing and Wringing Machine Co. of this place, is one of the most recent examples of what may be accomplished by our American inventors. Selden A. Bailey, of this company is the pioneer of the wringing machine business, having been engaged in the manufacture since the first patents were granted in 1859. Many of the earliest and most valuable inventions are his, including those used on the Novelty and Excelsior wringers. In his first experiments the rubber rolls were used in the head of a rotary hay cutter, but this was in time changed to the frame or wash bench, as now used. As usual in introducing a new invention it was difficult to get persons to buy and use these machines, and probably many in New London, Conn., will remember seeing Mr. B. with a wringer on his back, on washing days, looking for some one who was willing to try his machine—but their merit was such, that of the first twelve that were left on trial, eleven were kept and paid for. The Bailey Washing and Machine Company was incorporated in 1865, with a capital of $250,000. Lyman A. Cook, President, S. A. Bailey, General Agent, J. P. Whipple, Treasurer. This company occupy a main building 120 x40, 3 stories, wood, with stone basement. Two other buildings 75x40 each, 2 stories, respectively. A building 30x40, 1 story, was built in 1866. These buildings, with a new brick one built in fall of 1868, 25x50, 2 stories with an office 60x20, 1 story, comprise the principal buildings. This company consume 400,000 feet of hard and 300,000 feet of soft wood annually. The motive power is furnished by a 75 horse power engine with 2 boilers built by Woodruff & Beach. They employ 75 persons, the salesroom being at 17 Courtland street, New York. The Bailey Washing and Wringing machine is to well known to need any comment from us. Its presence is a household necessity and ranks among the first.

John Kendrick occupies a building on Main street 30 x 32, 2 stories, for the manufacture of reeds and harnesses, commencing in 1847. Employs 8 persons. H. C. Lazell, Superintendent.

James P. & Joseph G. Ray occupy a wooden building on Main street, for the manufacture of sheetings, seamless bags, warps, wicking, yarn, twine, &c., commencing here in 1862. The building is 90x45, 5 stories. They consume a ton of stock per day, the daily product being $400. Employ 75 persons, run 3,000 spindles, (coarse frames) 65 looms. The motive power is furnished by a 22 feet breast wheel, the fall being 17 feet. This business was established by James P. Ray, in 1840. The partnership of Ray & Bros. commenced in 1847, the present firm succeeding. This firm have a mill at North Bellingham and one at Franklin, Mass., both of which descriptions will be found under their appropriate heads.

The American Worsted Co. was incorporated in 1867, with a capital of $50,000. George C. Ballou, President; R. G. Randall, Treasurer; P. H. Brown, Superintendent. They have recently built a new mill, located near the "Globe Bridge," on the Main street, on the Blackstone river. The mill is 100x40, 5 stories, with French roof. They employ 75 persons, run 350 braiders, made by the New England Butt Co. and Rhode Island Braiding Machine Co. Consume 500 lbs. of wool, the daily production being 60,000 yards of dress braid, &c. The power is furnished by a 75 horse power Corliss engine, made by Harris. W. H. S. Smith, Travelling Agent.

The region including Woonsocket and vicinity, Cumberland, Smithfield, Blackstone and Bellingham, has 17 cotton mills, employing 3,500 hands, running 207,000 spindles, 4,030 looms, using 10,000,000 pounds of cotton and making 40,000,000 yards of cloth per annum; 8 woolen mills, employing 2,050 hands, running 114 sets of cards and 450 looms, using 5,300,000 pounds of wool, and making 2,9000,000 yards of fancy cassimere per annum. Other cotton mills, which will have 55,000 spindles, are in process of construction. Just beyond the limit of three miles from Woonsocket are 2 more cotton mills with 30,000 spindles, and a woolen mill with 19 sets. Other branches of manufacturing are represented in this region by a rubber factory, which employs 15 hands, and produces $500,000 worth of goods annually, machine shops, foundries, 1 boiler shop, 1 scythe shop, 2 manufactories of agricultural implements, 1 glue factory, 2 roof factories, 1 bobbin, 1 shuttle, 1 worsted mill, 1 tape mill, 4 or 5 sash and blind shops, contractors and builders, &c.

CONNECTICUT.

ANDOVER, 67½ miles from Providence, 22½ from Hartford. A country station on the Providence, Hartford & Fishkill Railroad.

Day Bros. occupy a mill at Marlboro', 9 miles from the above depot, for the manufacture of cotton warps and twines. The building is 3 stories, 50 x 25, wood, with basement of stone. They run about 600 spindles and use about 300 lbs. of cotton per day. The mill is run by an overshot wheel, the fall being about 22 feet, the wheel being 20 feet. The production of this mill is about 1,500 pounds per week. The office of the company is at 210 State street, Hartford.

Colchester, New London County, is an inland town, situated 15 miles from Norwich, 12 from the above depot, 11 miles from Connecticut river at East Dedham, 20 miles from New London, with all of which places, it is connected by a daily stage line—except the latter place, to which the stage runs on alternate days. This town is the seat of Bacon Academy, an old and renowned institution which for over thirty years ranked second only to Yale College, as an educational institution in the State. It was founded by Pierpont Bacon, who bequeathed $35,000 for this purpose, in the year 1800, and the walls of the institution were raised the same year. Owing to the financial changes of the times, its fund is too small to continue its rank as it formerly stood, and 2 departments are only kept up, a classical and normal department taught by Professor James M. Lindsey, of Yale College, and a department of English literature and the sciences under the direction of Daniel H. Sprague, A. B. Pupils are here fitted both for College and for business. Many excellent scholars and worthy men have been sent out from this time honored institution, among them, Bartholemew, the sculptor, Park Benjamin, Honorable Lyman Trumbull, of Illinois, Hon. Henry C. Deming, of Hartford, Connecticut, and others. There is, under the present arrangement, a lack of preparation of the scholar who enters the academy from the district schools, (which are kept in the same building,) too poorly qualified to take a high stand as scholars. The present board of Trustees are Hon. Eliphalet Buckley, of Hartford, Conn., Messrs. Horace Smith, Frederick Morgan, M. D., Alfred B. Pierce, William Foobe, Edward Strong and Alden Baker of Colchester; also, Rev. John A. Avery, of Lebanon. His Excellency, William A. Buckingham, formerly a trustee, recently resigned owing to the press of official duties.

We have gathered a few incidents in the life of Bacon, who was not famed for any literary attainments, or moving in any conspicuous course of usefulness, but one, who, by economy and industry, laid aside the sum which he bequeathed. He was a farmer, having a large landed estate, and proprietor of the "*Bacon House*," which stood about three miles from the village, on the old New London road—the venerable elm which stood near, serving for shade, and to support the sign which creaked among the branches. The house was built after the fashion of the generation which preceded it, and contained two large rooms in front; one of which served the two-fold purpose of bar-room and ladies' parlor, besides being the family sitting room.

In one corner was the bar, where dusty bottles told well for the habits of the visitors. Bacon married the daughter of Major Newton, who gained some distinction in the French and Indian war, and was killed at the seige of Louisburg, in 1758. The mistress of the house skillfully carded the tow, while the negresses plied untiringly their spinning wheels; thus by persevering industry, united with the most rigid economy, she assisted her husband to amass the wealth which gave them a position in society they could never have obtained in poverty, and enabled them to enjoy many years of prosperity. She who had but one calico dress, which was her best for twenty years, now increased her wardrobe, and even astonished her neighbors by making a damask counterpane. He was strangely economical, and it is recorded of him, that when he went to New London with his team, he would take from his pocket his "silver quarter," and, after looking at it some time, replace it, and rather than spend it he would go without his dinner. Many anecdotes, might be related did space permit, but the above will show that this institution was the result of patient perseverance and trial, that in the character of the generous benefactor, we should do well to imitate.

ANSONIA, 16 miles from Bridgeport, on the Naugatuck Railroad. A village of about 2,500 or 3,000 inhabitants, situated on the Naugatuck river, 2 miles north of Birmingham. The river furnishes power for many times the number of manufactories now in operation. There are 4 churches, 2 banks, 1 National and 1 Savings.

Farrel Foundry and Machine Company. This company was incorporated in 1857, and have a capital of $90,000. The officers of the company are as follows: Franklin Farrel, General Agent, Walter Fitch, Treasurer and Secretary, Edward C. Lewis, Agent at Waterbury. This company have beside their works here, another at Waterbury, Ct. Articles manufactured, general machinery and castings. At their works here they make a specialty in the manufacture of chilled rolls, rubber, brass, copper and iron rolling mill machinery, in the production of which, the works takes the lead in quality and quantity, having made a large

Farrel Foundry and Machine Co.,

Manufacturers of

CHILLED ROLLS,

AND

ROLLING MILL MACHINERY

FOR

Iron, Brass, Copper, Rubber, Britannia Ware and Paper Manufacturers; Rubber Calenders and Grinders, Heavy Mill Gearing, Shears, Power and Hand Presses, Veneer Cutting Machines, Shafting, Pulleys, and Iron and Composition Castings of all descriptions.

PATTERNS MADE TO ORDER.

FINE MACHINERY, of superior quality, manufactured in departments, especially adapted to that work.

CHILLED ROLLS, from five inches diameter upwards, of any length, made with our facilities are guaranteed perfectly TRUE on the face and free from pin holes or other imperfections. Our Rolls for Paper Calenders are ground by J. M. POOLE & CO.'S PATENT PROCESS. We also make to order,

CLEMOU'S PATENT FRICTION CLUTCH PULLEY.

These Friction Clutches require no adjusting, are strong and durable, and the best invention of the kind in use.

Works at Ansonia, Conn., and Waterbury, Conn.

Principal Office, Ansonia, Conn.

proportion of the brass machinery now in use in the United States. Occupy buildings for machine shop and foundry about 300x75 feet. Have 3 large store houses for patterns, which occupy about 150x40 feet, two and three stories in height. Machinery is driven by water power, breast wheel.

SLADE WOOLEN CO. This company was organized in 1865, for the manufacture of fine woolen goods, Wm. R. Slade, President, Charles L. Hill, Treasurer. Their main building is 162x50 feet, 4 stories, employing 110 persons, $\frac{3}{4}$ males, and doing a business of about $400,000 yearly. The motive power is furnished by an 80 horse engine, built by Hope Iron Works, Providence, R. I., and a 30$\frac{1}{2}$ inch Leffel wheel under 30 feet fall. Their goods are sold in New York, Philadelphia and Boston.

MESSRS. OSBORNE & CHEESMAN, are extensively engaged in manufacturing hoop skirts and skirt materials, including brass and tin trimmings, brass and silvered butts, tape, webbing, &c., employing from 250 to 300 hands. They occupy several buildings; the main one is brick, 200x50, 3 stories high; one mill 75x44, 3 stories; one mill 150x44, 1 story, together with a stone mill 100x40, four stories. The machinery is driven by over shot water wheels 30 feet in diameter.

MR. WILLIAM HAWKINS is engaged in the manufacture of Shirley's patent skates. He commenced business in 1864, and now occupies a frame building 3 stories in height, 30x90, with an L used as a forging shop, built of brick. Water power is used; a double 20 inch Parker wheel being employed to drive the machinery. He employs about 25 hands, making 10,000 skates per annum, consuming about 10 tons of steel. This skate is a marked improvement over the old fashioned skates of earlier days. It combines ease with novelty. It is formed of two parts so adjusted that straps are dispensed with, from which it is termed the "Strapless and Adjustable Toe and Heel Skate." The skate is fastened to the feet by being screwed into the soles and heels of the boots, which gives a free circulation to the blood, as well as ease and convenience in putting on. They are at present quite popular among the skating fraternity.

MESSRS. STURGIS & WHITLOCK, machinists, are specially engaged in the manufacture of mill shafting, water wheels, governors, twist reels, an improved button machine, and other machinery for incidental purposes. They occupy two large buildings, one 30x80, with an L. 36x22, and the other 22x66. The machinery is driven by a twenty horse power engine, which was made in Hartford, with upright tubular boilers. Their business is quite extensive and is on the increase, amounting last year to about $30,000.

MESSRS. A. H. & C. B. ALMY manufacture woolen yarns, fine Saxony box yarn, stocking yarns and men's half hose, &c. They run six sets of cards, giving employment to about 100 hands in their mill. This is 142x60 feet, with an L 50 x50, built of brick, 3 stories high. Connected with it, is a dye house and a building used as an office. In making their hose, they give employment to about 125 persons, among the families in the vicinity.

AVON, a village of about 400 inhabitants, situated on the Farmington river, 37 miles from New Haven and 39 from Northampton on the Canal Railroad; contains 1 church.

BALTIC, 48 miles from Providence, 42 from Hartford, on the Providence, Hartford and Fishkill Railroad. A manufacturing village owned most-

ly by the A. & W. Sprague Manufacturing Co. The houses are all white, built alike, situated on streets running parallel with the railroad.

Anchor Mills, James Petrie, proprietor, commenced the manufacture of tweeds, in 1864. The mill is 80x30, four stories, built of wood, located on Beaver brook, a tributary of the Shetucket. The mill has 2 sets and 16 looms; consumes 2,000 pounds of stock per week, producing 2,000 yds., employing 30 persons. The power is supplied by Clark & Chapman 18 inch wheel, the fall being 23 feet. A Woodruff & Beach's 15 horse power engine assists in supplying the power when needed. John N. Park, Sup't.

Wm. Alting occupies a one set mill, containing 14 narrow looms for the manufacture of tweeds; employing 12 persons. Situated on Beaver brook, producing 1,200 yds. per week. Wm. Park, Sup't.

The largest cotton mill in the United States, is the one located here belonging to the A. & W. Sprague Manufacturing Co. For information, see A. & W. Sprague Manufacturing Co., Providence, R. I.

BEACON FALLS, 23 miles from Bridgeport. A station on the Naugatuck Railroad.

BECKLEY, 2 miles from Berlin and 8 from Middletown. A country station on the Middletown Branch.

BERLIN, 10 miles from Hartford, 10 from Middletown and 26 from New Haven, on the New Haven, Hartford and Springfield Railroad. The Middletown and New Britain Branches leave the main road here. A country station.

BETHEL, 22 miles from Norwalk, 1½ from Danbury village, and 67 from New York. A small manufacturing village in the town of Danbury, Fairfield County, on the Danbury & Norwalk Railroad.

H. E. Hickok & Co., manufacturers of felt hats. This company commenced business in the year 1845. They occupy 2 buildings, one of which is 35x40 feet, 2 stories high and built of wood, and the other is 45x40 feet, 2 stories high and is also built of wood. This company are making the ordinary felt hat.

O. Benedict & Co., manufacturers of fur hats, established their business in 1845. The sizes of their buildings are as follows: One 220x32 feet, 4 stories high; one 68x32 feet, 1 story; one 24 x 36 feet, 1 story; one 60 x 20 feet, 1 story. They employ 300 hands and produce 275,000 hats yearly. Their office is at 510 Broadway, New York.

Bethel Hat Forming Co., established in 1866 for the manufacture of fur hat bodies, occupy a building 86x50 feet, employ 30 hands and produce about 2,200 hat bodies daily, and produce about $17,000 worth of fur shoddy per year. The machinery is driven by a 60 horse engine, built at the Atlantic Iron Works, Brooklyn, New York. This company do a business of $40,000 per year. Geo. J. Hopkins, Sec.

Messrs. Judd & Co. commenced, in 1865, as manufacturers of fur hats. They occupy a building 30 x 100 feet, employ 50 hands and produce 3,000 hats per year, doing business of $75,000.

BLACK HALL, 35½ miles from New Haven, 14½ from New London, 112 from New York and 120 from Boston, on the Shore Line. A small country station.

BOLTON, 73½ miles from Providence 16½ from Worcester. A country station on the Providence, Hartford and Fishkill Railroad in the town of Bolton. A valuable stone quarry is located here.

BOTSFORD, 15 miles from Bridgeport and 95 from Pittsfield. A country station on the Housatonic Railroad.

BRADLEY'S, between Brook's and Mount Carmel. A flag station on the Canal Railroad, 10 miles from New Haven.

BRANFORD, 8¼ miles from New Haven, 41¾ from New London and 84 from New York on the Shore Line. Branford Centre is located ½ mile north of the depot. "Double Beach" and "Bradford Point," are summer resorts and noted for fine bathing.

Holcomb & Say commenced in 1848, the manufacture of poles and shafts. They occupy a 2 story building, and employ 5 persons. The motive power is furnished by a 20 horse power engine, made by Woodruff & Beach with one boiler.

Branford Lock Works. The business of manufacturing locks at this point, was commenced many years ago by Thomas Kenedy & Co., who followed it until 1865, when the above named firm commenced with a capital of $150,000. They occupy a building 240x140. The power is furnished by 1 Woodruff & Beach's 75 horse steam engine, with 1 flue boiler. They employ 225 men, and of locks manufacture about $35,000 worth per month.

Malleable Iron Fittings Co. This Company was incorporated in 1864, with a capital of $125,000. They occupy 4 brick buildings. The main building is 75x60, 3 stories, foundry 60x170, annealling building 60x80, cove building 25x60. They employ 82 hands and manufacture steam and gas fittings, and every variety of malleable iron castings to order, and make per day of fittings 1½ tons, and of castings 7 to 8 tons per month. The power is furnished by 1 of Allen's patent 35 horse steam engine with 1 flue boiler. They also have 14 C. C. Walworth's patent tapping machines, and many other machines of different kinds too numerous to mention here. These works are conveniently situated within a short distance of the railroad depot.

BRIDGEPORT, 17½ miles from New Haven, 58½ from New York, on the New York & New Haven Railroad. The Housatonic Railroad and Naugatuck Railroad centre here. The former runs to Pittsfield, 110 miles, the latter to Winsted, 62 miles. A line of steamers run daily to New York. The harbor is not deep enough for large vessels to enter, the water at the bar being only 13 feet deep at high tide. This city was formerly a part of Stratford, the adjoining town, and was incorporated under its present name in 1821. In 1836 it became a city. This is one of those wide-awake, enterprising, beautiful and

flourishing cities in New England, the pride of Yankees and the admiration of strangers. It is located on an elevated plain, and commands a fine view of the Sound. Neatness and elegance are the characteristics of its public and private buildings. The growth of this city has been very rapid for the past few years, owing, in a great measure, to the establishment of some of the leading manufacturing concerns in the world. In 1836 the population was 1,800, to-day it is 18,000. East Bridgeport, a part of the city, is growing more rapidly than any other. This city is the home of Barnum and his "Thumb," (Charles S. Stratton.)

MANUFACTURERS.

The Bridgeport Manufacturing Company is engaged in the manufacture of the celebrated "American Submerged Pump," a description of which is found below.

This company was incorporated November, 1866, with a capital of $30,000, which, within a short time, has been increased to $300,000. Their factory in East Bridgeport is in the old building formerly occupied by the Wheeler & Wilson Sewing Machine Co. It is built of brick, 3 stories high, and covers an area of upwards of 3 acres. Their foundry is situated on the Bridgeport side of the harbor. The constantly increasing demand for these pumps necessitated the increase of capital stock, and we believe there is no pump known which combines so many good qualities with comparative cheapness as the American Submerged. We had the pleasure, through the kindness of James Wilson, Esq., President of the company, and Mr. Charles F. Mudge, Secretary and Treasurer, of examining both the pump and the manner of making it. While one is struck with the simplicity of its construction, he cannot but be more so while witnessing its wonderful capacity and power. It is a non-freezing, double-acting force pump, with a solid head piston in action,—has no packing, is almost frictionless,—and is especially adapted for deep wells, ship, house, fire and irrigating purposes. They are made of iron, brass and galvanized iron. The latter named material does not impart any unpleasant taste to water when placed in wells, and also effectually resists the action of certain acids, alkalies, and salt water. We have seen certificates of parties high in public esteem and confidence, regarding its efficacy. See Report of the United States Life Saving Commission of 1868. We note also the names of Eben Howes, Surveyor French Lloyds; John Devereux, Surveyor American Lloyds; Charles B. Stuart, Consulting Engineer, U. S. N.; James Kearney, Surveyor American Lloyds, at San Francisco; James B. Eads, U. S. gunboat builder at St. Louis; Herman Winters, Novelty Iron Works, New York, and many ship owners, factory men, sea captains, &c., &c., all of whose opinions are that it is the "simplest and best mechanical combination that they ever saw."

Among all the large and extensive establishments in the flourishing city of Bridgeport, there is none of more importance than this is destined to be, from the fact that a reliable pump has long been needed—as the records of the Patent Office will show—and we take pride and pleasure in calling attention to their advertisement on the colored leaf opposite 280th page of this work.

The Howe Machine Co.'s establishment for the manufacture of the Howe Sewing Machine, is situated here on the slope of a beautiful lawn running down to the Pequonnock river, and presenting a fine appearance to every traveler through the town. This successful establishment has an especial interest to the public, inasmuch as it was the culminating work of the late Elias Howe, Jr., the celebrated inventor of the sewing machine. After perfecting this great boon to the human race, and seeing its manufacture and trade widely spread throughout the world, he was anxious also to associate with his name a large factory of sewing machines, where his increasing industry, and wish to improve the machine itself, could find constant play through the remainder of his life. He therefore devoted to this purpose all the income from his royalties, and put up this fine structure. It covers an entire block of land, with a frontage of several hundred feet and various wings, all three and four stories high. Starting in Jan. 1864, with a capital stock $300,000, Mr. Howe soon found the inadequacy of such a sum for the extent of its business; and the unprecedented honor of winning the first gold medal at the great Paris Exposition of 1867, and securing to Mr. Howe himself, as inventor and improver of all sewing by machinery, the Cross of the Legion of Honor from the French Emperor himself, have rendered an investment necessary to the business of four or five times the amount of the original capital. The company now employ between four and five hundred hands, who enable them to send out at this date about 750 sewing machines a week, while their orders call for a yield of three or four hundred more each week. They are therefore constantly exerting themselves to increase the producing capacity of their present buildings, and are at this moment enlarging their structure in such a way as shall enable them to keep up with the constant outcries of their agents for a more prompt attention to their neglected orders. The enormous and still increasing sale of sewing machines of all kinds throughout the world, is one of the amazing phenomena of the present age. No one who watches it in the least, fails to be astonished, and to enquire, "Where do they all go to?" and "where will it stop?" But truly it may be conceded, that Mr. Howe, in this invention, not only gave one of the greatest benefits to the working classes of the human race; but established one of the greatest business interests of the present day in the world. And no more marked instance of its wonderful progress and activity is to be found in our country than in the splendid success of The Howe Machine Co., and of the machines that it is so profusely scattering over the world.

Bridgeport Brass Co. manufacturers of rolled brass and copper tubings, lanterns, lamps, collars and globe holders, the sun burner, skirt clasps, corset hooks, tobacco boxes, oilers, Moore's kettle bottoms, and all kinds of press work in brass or copper. The company was incorporated in 1865, with a capital of $150,000. The business was originally established by Wilmot & Kissam, in Brooklyn, N. Y. The factory is a nice brick building of 130x116 feet, 3 stories high. A steam engine of 120 horse power and having 2 tubular boilers, furnish the required power. Hands employed, 200. The amount of flooring in outside buildings is about 4,000 feet. President, John Davol; Secretary and Treasurer, D. W. Kissam; Superintendent, G. L. Smith.

Osborn Manufacturing Co. This company was incorporated in October, 1867, having been first established a number of years previous, by G. R. Osborn, in New York. They have a capital of $25,000, and manufacture a new kind of patented ornamental bird cage, in various styles. In addition to this business, they are engaged largely in the manufacture of gold and silver hand and electro-plating of all kinds, and also all styles of bronzing. They occupy a part of the old building formerly occupied by Wheeler & Wilson in the manufacture of sewing machines, using one floor of upwards of 4,000 square feet. They employ about 35 hands.

A. Temple commenced the manufacture of patent incrustation, for removing scale and cleaning the inside of steam boilers, in 1853. His manufactory is located on the dock in the rear of Water street. Employs 4 persons. Mr. T. claims to prevent the corrosion of the iron, and to remove all scales in a satisfactory manner.

BRIDGEPORT MALLEABLE IRON WORKS,

BRIDGEPORT, CONN.

MALLEABLE IRON CASTINGS,

Castings for Carriages, Harness, Apple Paring Machines, Guns, Plows, Car Trimmings, Sewing Machines, Coffee Mills, Blind Trimmings, Locks, Scythes, Pumps, Mowing Machines, Vises, Ships, Machinery, Patent Articles, &c., made to order from samples.

A large stock of Carriage Castings and Axle Nuts constantly on hand. Metal Patterns made to order.

HUBBELL, WALKER & GILL.

ELISHA HUBBELL, JOHN O. WALKER, GEORGE F. GILL.

The Ætna Axle and Spring Co. was incorporated in 1866. George Hopson, President; C. C. Bullock, Secretary and Treasurer. The works are located on John street, occupying 3 buildings, the main one being 34 x 93, 3 stories; another, 29x93, 1 story, and one 35 x 60, 3 stories. They employ 50 persons, and turn out 50 sets per day of springs and 10 sets of axles. Consume 1,200 pounds of steel daily. The motive power is furnished by a 40 horse power engine, with 2 Union boilers.

Hanson & Moore, commenced the manufacture of paper boxes, on Water street, in 1866. Building 150x30, 4 stories; using the upper story for their manufactory; employing 15 hands. This firm use about 3 tons straw board and 10 reams Manilla and fancy paper per month, turning out about 1,300 boxes per day.

The Furniture Manufacturing Co., incorporated in 1852, for the manufacture of furniture, such as chamber sets, wardrobes, &c., &c. On the night of October 22, 1866, this company suffered a great loss and detention in their business by their large manufactory taking fire, burning and damaging their works to a considerable extent, but in 90 days they had other buildings rebuilt, and they now cover 40,000 square feet, of 3 and 4 stories. Their motive power is derived from a 65 horse power steam engine, of the Pacific Iron Works' make, with 2 flue boilers with water fronts. Their sales will average about $20,000 per month.

W. M. Stillman commenced the manufacturing of skirts at 26 Beaver street, in 1837; employing 50 hands; running 25 sewing machines, Wheeler & Wilson's make, and turning out about 10 dozen shirts per day. His laundry is situated on North avenue, 1¼ miles from the factory, where he employs 12 persons.

B. K. Mills & Co., was incorporated in 1846, with a capital of $20,000, the business being established in 1836. The officers of the company are Frederick Wood, President; W. K. Mills, Secretary; B. K. Mills, Treasurer; located at 58 Cannon street; the manufactory is 70x30, 3 stories, built of wood, basement of brick; employ 24 persons and do a business of $36,000 per year.

S. P. Wheeler & Co., analytical and manufacturing chemists, John street, commenced business in July, 1868, occupy a part of the 3d floor for the office, the labratory being in the rear. They are manufacturing chemicals for manufacturers use, and do an analytical business also. Some of the goods made by this firm are no where else to be obtained in the United States; the principal article being to make a chemical compound for rendering wood impervious to water. S. P. Wheeler is an old and reliable chemist and is well known in this State.

Bridgeport Patent Leather Manufacturing Co., was incorporated in 1849, with a capital of $20,000, since increased to $100,000. S. Tomlinson, President, S. J. Patterson, Treasurer, J. E. Pond, Secretary; the works are located at 47 Cannon street, occupying a lot 210x170, most of the buildings being three stories. The leather is tanned on the premises and converted into patent leather, the weekly production being 140 hides, with a capacity of 300; employ 30 persons; most of the business of this house was formerly done south. The power is furnished by a 20 horse power engine.

I. H. Isbell commenced the manufacture of ivory buttons in 1866. In March, 1868, Sheldon Collins of New York, became proprietor, Mr. I. acting as his agent. This company is located in John street, and employ 40 persons. The monthly production being about $2,000. This establishment intend to enlarge soon.

F. Latrop commenced the manufacture of saddle-trees, Broad, corner Railroad avenue, 1848. He employs 5 persons, the daily production being 1 dozen per day. The building is 28x44 feet, 2 stories.

As the train leaves the depot and you are on the outskirts of the city going towards New York, the traveler will notice on the left a brick manufactory with a large sign on the building, "Bridgeport Malleable Iron Works." The proprietors being: Hubbell, Walker and Gill. The firm was founded in March, 1868, being successors to Elisha Hubbell, who is now one of the firm. The works are three-fourths of a mile from the depot in the town of Fairfield, the city line passing very near. The building is 300x300 feet, 1 story; employ 30 persons. The motive power is furnished by a 12 horse power engine. Malleable iron castings of every description are made here.

Broadmeadow & Keeler, 75 Cannon street, commenced business in June, 1867, at the above place. Their buildings are very handily arranged for the purpose, the main building being of brick 55x20 feet, 2 stories, with sheds and offices adjoining. This firm keep 17 persons employed, turning out about a ton of castings daily. They intend to manufacture cast butts of all descriptions as soon as possible.

C. Capen, proprietor Golden Hill Shirt Manufactory, commenced here in 1860, the business being established here some 3 years previous. The building is at 60 Cannon street, 26x62 feet, 3 stories. He employs 40 persons, turning out 40 dozen of shirts per week, when the works are in full operation, using 1,200 yards of cloth for their manufacture, doing a business of $25,000 per annum.

Bridgeport Shoe Co., incorporated in 1864, capital $10,000, for the manufacture of ladies' and misses' shoes.

L. W. Clark, President and Treasurer, P. Vredenburg, Secretary. This company's works are situated at 20 Beaver street, and is 60x30 feet, 4 stories high; employing 12 hands; turning out about 450 pair shoes per month.

S. S. May & Co., 18 Beaver street, commenced business in 1861, for the manufacture of harnesses and saddlery; employing 45 hands; building 60x25 feet, 4 stories.

William L. Flynn, manufacturer of hoop skirts, commenced business in 1864, at 16 Beaver street; now employs 20 hands, making about 100 dozen skirts per month.

Crossley & Lord, carpet manufacturers, commenced business in 1868. Manufactory situated between Water and Main streets, nearly opposite the Housatonic depot, on Water street. The main building, where they have their machines for felting and printing, is 200x80, 1 story, L 80x40, 1 story, for washing, scouring, steaming, &c.; engine house 60x30. This company uses one of the Pacific Iron Works' 25 horse power steam engines, with 4 flue boilers. Also, they use one of Groton's steam pumps, of 4 horse power, for pumping water into the boilers; also to use in case of fire. This company employs 120 hands, and manufactures about 500 yards carpeting, using about 700 lbs. wool per day.

R. S. Beers & Co., 9 State street. This firm commenced the manufacture of hoop skirts in 1860; employ 20 persons, making about 20 dozen skirts per day. Building 25x50 ft., 4 stories.

Spring Perch Co., John street, manufacturers of springs and axles. Also, brass and plated trimmings, curtain rollers, &c. This company was established in 1840, and was incorporated in 1854. E. Sterling, President; F. B. Hawley, Treasurer; E. W. Marsh, Secretary. The main building is 185x35, with two wings 60x40 and 70x90, respectively. The motive power is furnished by a 60 horse power engine, built by the Pacific Iron Works. Employ 150 persons; the monthly production being 16,000 set of springs and axles, Capital, $75,000.

The Tomlinson Spring and Axle Co. was incorporated in 1854, with a capital of $100,000, for the manufacture of springs and axles. R. Tomlinson, President; Wm. G. Lineburg, Secretary; Samuel B. Ferguson, Treasurer. Their works are 350x120, divided into axle, spring and grinding departments. This company employ 100 men, and the power is furnished by a 75 horse power engine with two Union boilers, engine and boilers built by the Pacific Iron Works, of this city.

The Wheel & Wood Bending Co., located on John street, was incorporated in 1866 with a capital of $60,000. H. Smith, President, F. B. Doten, Secretary and Treasurer. This company are successors to Smith, Barlow & Company. Bent felloes, carriage bows, shafts, poles, &c., are made here, occupying a 3 story building 80x30 feet, with L 50x25 feet. Employ 25 persons; the annual production being $85,000. The motive power is furnished by a 25 horse power engine, built by the Pacific Iron Works, with 2 flue boilers. This business was established some 15 years since.

The Bridgeport Knitting Co. was incorporated in 1864 with a capital of $50,000. Samuel Larkin, President and Treasurer, C. P. Curtis, Secretary. This business is comparatively in its infancy, occupying an office on John street, and employing 25 persons.

The American Shovel Co. was incorporated in 1853 with a capital of $40,000, since reduced to $20,000. Ebenezer Wheeler, President. They occupy a building 40x40 feet, 4 stories. The business is very irregular; letting most of the building to other parties, and employing only a few persons.

The Mallory Manufacturing Co. was incorporated in 1865 with a capital of $200,000. George Mallory, President, William H. Mallory, Secretary and Treasurer. This company own and control the Resorte patents on hats. The office is under the Atlantic Hotel, Beaver, corner Water st. Office in New York at Samuel Shethar & Co., 548 Broadway. This company do not manufacture themselves, but their patents are used under royalties, paid monthly by nearly 200 licenses, including all the largest manufactories of hats in the country.

Meeker & Shelton commenced business at No. 28 Beaver street corner of Middle street, in 1868, as successors of Lacy, Meeker & Co., the oldest manufacturers of harness and saddlery in the United States. Their building is 200x300, four stories, employing 150 hands; do business of about $30,000 per month.

Bissett, Wells & Keeler, commenced the manufacture of harness and saddles in 1866, at No. 70 State st. Their building is 44x57, ell 16x20, three stories; employing 23 hands, and manufacture about $4,000 worth of stock per month.

J. Mott & Co. Association, 68 State street, manufacturers of coaches, barouches, &c., incorporated 1850; capital $40,000. A. Penfield, President; B. Hawley, Secretary and Treasurer. This company uses two large buildings, the first being 150x30, three stories; first story used for their repository, office and trimming rooms; second and third, for painting. The second building is built of brick, and is 100x50, three stories, with ell 50x50, two stories. On the first floor is their blacksmiths' shop; in the second story, their body shop, using the third for a stock room. They employ 50 persons, turning out about 125 coaches a year.

The Bridgeport Skirt Co., incorporated 1865; capital, $20,000. R. Bassett, President; J. D. Whitney, Treasurer and Secretary. Occupying the two upper floors in building No. 13 State street, for the manufacture of hoop skirts; employing 50 persons, and turning out about 30 dozen skirts per day. The building being 80x40, three stories.

The Bridgeport Button Co. Incorporated 1865, for the manufacture of ladies' dress and covered buttons. Capital, $10,000. S. C. Trubee, President; John Hurd, Secretary; J. E. Donnerly, Agent. Factory situated at 25 Water st., and is 90x72, two stories. The first floor in front being used for office, and packing room, while in the rear is their 17 horse power steam engine with flue boiler built by Pacific Iron Works, which drives besides 7 stamping machines on this floor, 26 stamping, 3 lathes, 2 drop presses and 2 power presses, on the second floor. Employs 35 hands, turning out on an average, 200 gross buttons per day.

A. R. Hale & Co., manufacturers of Tobey's patents, viz.: American switch light signals for railroads, patent device for raising and lowering windows, and the Mullion sash fastener. The company was formed in June, 1868. Their office is on Water street, near the depot. Their different patents are made by contract, although their intention is to soon erect a manufactory for the manufacture of their different patents.

Belknap & Burnham, brass founders and manufacturers of all kinds of valves, cocks, steam whistles, oil cups, &c., formed their partnership in 1863, removing to their new spacious manufactory, comprising 2 floors, 75 x 35, in the brick building near the depot, in August, 1868. They employ 50 persons and consume 200,000 lbs. of metal yearly, doing a business of $100,000.

B. W. Leonard commenced the manufacture of portable grist mills and French burr millstones in 1856, the business being established in 1832. The works are directly opposite the depot, being 120 x 40, mostly 2 stories. He employs 7 persons and makes 40 mills per year, the business amounting to about $20,000.

THE ODORLESS RUBBER COMPANY,

—— MANUFACTURERS OF ——

INODOROUS

Rubber Goods

THE

Odorless Rubber Co.,

HAS REMOVED TO

MIDDLETOWN, CONN.

Turney, Secretary. They occupy the 2d, 3d, and 4th floors of building 36x80; Water, corner Gilbert street; employ 30 persons, and turn out 15 dozen per week. They have of late paid most of their attention to the laundry business.

One of the largest and oldest builders of steam engines, boilers, and general machinists, is the PACIFIC IRON WORKS, Skidmore, Lowe & Co., Proprietors, corner Cedar and Pacific streets, of this city. The establishment dates back to 1852. The main building is 175x40 2½ stories, built of brick, used for the setting up and manufacture of their steam engines. This building has two ells, the largest 120x40 1 story, being used for blacksmith, forger, and boiler shop; the other ell for a foundry. Some idea can be had of the immense business done by this concern, when 60 tons of iron are used per month. The motive power is furnished by a 40 horse power engine, with a 42 inch 28 feet furnace flue boiler, both made by this company, and all a model of mechanical ingenuity and skill for which this cut where we have visited, although a great number are sent to the Southern and Western States and the Territories. This establishment is one of the principal manufactories of this enterprising city whose population is increasing very fast, situated as it is at a railroad terminus of the Housatonic and Naugatuck Railroads, and on the direct line from Boston to New York, and a short distance from Long Island Sound. Boats leave here daily for New York, placing this establishment in a short and direct communication with all parts of the United States, both by water and rail.

THE ODERLESS RUBBER CO. The Odorless Rubber Company, recently established in Bridgeport, Ct., are manufacturing a very superior article of enamelled rubber cloth, intended as a substitute for enamelled leather, so much used for covering first class carriages of all kinds. It has been well tested and pronounced superior to leather. Neither the enamelled figure nor the varnish have ever been equalled, and being made under the Simpson patent, it has none of

L. W. Clark, President and Treasurer, P. Vredenburg, Secretary. This company's works are situated at 20 Beaver street, and is 60x30 feet, 4 stories high; employing 12 hands; turning out about 450 pair shoes per month.

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William L. Flynn, manufacturer of hoop skirts, commenced business in 1864, at 16 Beaver street; now employs 20 hands, making about 100 dozen skirts per month.

Crossley & Lord, carpet manufacturers, commenced business in 1868. Manufactory situated between Water and Main streets, nearly opposite the Housatonic depot, on Water street. The main building, where they have their machines for felting and printing, is 200x80, 1 story, L 80x40, 1 story, for washing, scouring, steaming, &c.; engine house 60x30. This company uses one of the Pacific Iron Works' 25 horse power steam engines, with 4 flue boilers. Also, they use one of Groton's steam pumps, of 4 horse power, for pumping water into the boilers; also to use in case of fire. This company employs 120 hands, and manufactures about 500 yards carpeting, using about 700 lbs. wool per day.

R. S. Beers & Co., 9 State street. This firm commenced the manufacture of hoop skirts in 1860; employ 20 persons, making about 20 dozen skirts per day. Building 25x50 ft., 4 stories.

Spring Perch Co., John street, manufacturers of springs and axles. Also, brass and plated trimmings, curtain rollers, &c. This company was established in 1840, and was incorporated in 1854. E. Sterling, President; F. B. Hawley, Treasurer; E. W. Marsh, Secretary. The main building is 185x35, with two wings 60x40 and 70x90, respectively. The motive power is furnished by a 60 horse power engine, built by the Pacific Iron Works. Employ 150 persons; the monthly production being 16,000 set of springs and axles, Capital, $75,000.

The Tomlinson Spring and Axle Co. was incorporated in 1854, with a capital of $100,000, for the manufacture of springs and axles. R. Tomlinson, President; Wm. G. Lineburg, Secretary; Samuel B. Ferguson, Treasurer. Their works are 350x120, divided into axle, spring and grinding departments. This company employ 100 men, and the power is furnished by a 75 horse power engine with two Union boilers, engine and boilers built by the Pacific Iron Works, of this city.

The Wheel & Wood Bending Co., located on John street, was incorporated in 1866 with a capital of $60,000. H. Smith, President, F. B. Doten, Secretary and Treasurer. This company are successors to Smith, Barlow & Company. Bent felloes, carriage bows, shafts, poles, &c., are made here, occupying a 3 story building 80x30 feet, with L 50x25 feet. Employ 25 persons; the annual production being $85,000. The motive power is furnished by a 25 horse power engine, built by the Pacific Iron Works, with 2 flue boilers. This business was established some 15 years since.

The Bridgeport Knitting Co. was incorporated in 1864 with a capital of $50,000. Samuel Larkin, President and Treasurer, C. P. Curtis, Secretary. This business is comparatively in its infancy, occupying an office on John street, and employing 25 persons.

The American Shovel Co. was incorporated in 1853 with a capital of $40,000, since reduced to $20,000. Ebenezer Wheeler, President. They occupy a building 40x40 feet, 4 stories. The business is very irregular; letting most of the building to other parties, and employing only a few persons.

The Mallory Manufacturing Co. was incorporated in 1865 with a capital of $200,000. George Mallory, President, William H. Mallory, Secretary and Treasurer. This company own and control the Resorte patents on hats. The office is under the Atlantic Hotel, Beaver, corner Water st. Office in New York at Samuel Shethar & Co., 548 Broadway. This company do not manufacture themselves, but their patents are used under royalties, paid monthly by nearly 200 licenses, including all the largest manufactories of hats in the country.

Meeker & Shelton commenced business at No. 28 Beaver street corner of Middle street, in 1868, as successors of Laey, Meeker & Co., the oldest manufacturers of harness and saddlery in the United States. Their building is 200x300, four stories, employing 150 hands; do business of about $30,000 per month.

Bissett, Wells & Keeler, commenced the manufacture of harness and saddles in 1866, at No. 70 State st. Their building is 44x57, ell 16x20, three stories; employing 23 hands, and manufacture about $4,000 worth of stock per month.

J. Mott & Co. Association, 68 State street, manufacturers of coaches, barouches, &c., incorporated 1850; capital $40,000. A. Penfield, President; B. Hawley, Secretary and Treasurer. This company uses two large buildings, the first being 150x30, three stories; first story used for their repository, office and trimming rooms; second and third, for painting. The second building is built of brick, and is 100x50, three stories, with ell 50x50, two stories. On the first floor is their blacksmiths' shop; in the second story, their body shop, using the third for a stock room. They employ 50 persons, turning out about 125 coaches a year.

The Bridgeport Skirt Co., incorporated 1865; capital, $20,000. R. Bassett, President; J. D. Whitney, Treasurer and Secretary. Occupying the two upper floors in building No. 13 State street, for the manufacture of hoop skirts; employing 50 persons, and turning out about 30 dozen skirts per day. The building being 80x40, three stories.

The Bridgeport Button Co. Incorporated 1865, for the manufacture of ladies' dress and covered buttons. Capital, $10,000. S. C. Trubee, President; John Hurd, Secretary; J. E. Donnerly, Agent. Factory situated at 25 Water st., and is 90x72, two stories. The first floor in front being used for office, and packing room, while in the rear is their 17 horse power steam engine with flue boiler built by Pacific Iron Works, which drives besides 7 stamping machines on this floor, 26 stamping, 3 lathes, 2 drop presses and 2 power presses, on the second floor. Employs 35 hands, turning out on an average, 200 gross buttons per day.

A. R. Hale & Co., manufacturers of Tobey's patents, viz.: American switch light signals for railroads, patent device for raising and lowering windows, and the Mullion sash tastener. The company was formed in June, 1868. Their office is on Water street, near the depot. Their different patents are made by contract, although their intention is to soon erect a manufactory for the manufacture of their different patents.

Belknap & Burnham, brass founders and manufacturers of all kinds of valves, cocks, steam whistles, oil cups, &c., formed their partnership in 1863, removing to their new spacious manufactory, comprising 2 floors, 75 x 35, in the brick building near the depot, in August, 1868. They employ 50 persons and consume 200,000 lbs. of metal yearly, doing a business of $100,000.

B. W. Leonard commenced the manufacture of portable grist mills and French burr millstones in 1856, the business being established in 1832. The works are directly opposite the depot, being 120 x 40, mostly 2 stories. He employs 7 persons and makes 40 mills per year, the business amounting to about $20,000.

THE ODORLESS RUBBER COMPANY,

—MANUFACTURERS OF—

INODOROUS

Rubber Goods

THE

Odorless Rubber Co.,

HAS REMOVED TO

MIDDLETOWN, CONN.

Turney, Secretary. They occupy the 2d, 3d, and 4th floors of building 36x80; Water, corner Gilbert street; employ 30 persons, and turn out 15 dozen per week. They have of late paid most of their attention to the laundry business.

One of the largest and oldest builders of steam engines, boilers, and general machinists, is the PACIFIC IRON WORKS, Skidmore, Lowe & Co., Proprietors, corner Cedar and Pacific streets, of this city. The establishment dates back to 1852. The main building is 175x40 2½ stories, built of brick, used for the setting up and manufacture of their steam engines. This building has two ells, the largest 120x40 1 story, being used for blacksmith, forger, and boiler shop; the other ell for a foundry. Some idea can be had of the immense business done by this concern, when 60 tons of iron are used per month. The motive power is furnished by a 40 horse power engine, with a 42 inch 28 feet furnace flue boiler, both made by this company, and all a model of mechanical ingenuity and skill for which this cut where we have visited, although a great number are sent to the Southern and Western States and the Territories. This establishment is one of the principal manufactories of this enterprising city whose population is increasing very fast, situated as it is at a railroad terminus of the Housatonic and Naugatuck Railroads, and on the direct line from Boston to New York, and a short distance from Long Island Sound. Boats leave here daily for New York, placing this establishment in a short and direct communication with all parts of the United States, both by water and rail.

THE ODERLESS RUBBER CO. The Odorless Rubber Company, recently established in Bridgeport, Ct., are manufacturing a very superior article of enamelled rubber cloth, intended as a substitute for enamelled leather, so much used for covering first class carriages of all kinds. It has been well tested and pronounced superior to leather. Neither the enamelled figure nor the varnish have ever been equalled, and being made under the Simpson patent, it has none of

BRIDGEPORT IRON WORKS,

Manufacturers of

IRON AND BRASS, ROLLING MILL AND RUBBER

MACHINERY;

Power and Hand Presses; Trip Hammers, Shears, Shafting, Gearing, Pulleys, and mill work of all descriptions.

Manufacturers and Agents for

Van DeWater's Improved

TURBINE WATER WHEEL,

Best Water Wheel in use. Our Millwright work is under the superintendence of

B. H. HULL, Experienced Hydraulic Engineer and Millwright.

Also, Steam Boilers, Tanks, &c.

One Rod North of New York and New Haven Railroad Depot.

Bridgeport, - - - Connecticut.

W. S. HUMPHREY, *Sec'y.* R. M. JOHNSON, *Sup't.*

the disagreeable odor hitherto inseparable from this kind of goods. The India rubber hose made at this factory under Chaffee's patent, possesses several superior qualities, among which is its freedom from uncombined sulphur, an excess of which is so detrimental to cotton fabrics. By reason of its new form being first made round and then vulcanized and flattened or partially collapsed, it occupies no more space upon the hose-reel than the ordinary leather hose. Thus made, and occupying so little space, a much stronger five or six ply hose can be used than other wise. It retains its flattened form, except when the pressure of water expands it perfectly round. The company are also manufacturing another kind of hose, which is considered, by some, superior to the one first described. It possesses great strength, extreme lightness, and occupies the smallest possible space; advantages which recommends it to all who have tried it. This hose is also made under Chaffee's patent, for lining seamless woven hose with India rubber.

UNION METALLIC CARTIDGE CO. This company was incorporated in 1867 with a capital of $300,000. The main building is of brick, three stories high, and 140x40 ft. The goods manufactured by this company are metallic cartridges. The demand is mostly from the Western States and foreign countries. The steam power is derived from two flue boilers, running a 60 horse power engine, made by Woodruff & Beach. In the entire manufactory, 130 hands are employed.

WHITE MANUFACTURING CO., Cannon street. This company was incorporated in the year 1861, with a capital of $40,000. The goods made by this company are coach lamps, signal and side lamps for steam fire engines, carriage and saddlery hardware, of every description; gold and silver plating, iron and steel. The main building was built of brick, 60x40 feet. Adjoining this is a wooden building 40x80 ft. Both are three stories high. The engine used is one of Skidmore, Lowe & Co.'s patent, with a 28 feet tubular boiler of 50 horse power. This company are making preparations for grinding the glass used in their lanterns, and when completed they will have every facility for carrying on the various processes required in the manufacture of lanterns. They also make spring curtain rollers, straight, circular and Landau, and are sole agents for Wood's patent concealed hinges.

THE BRIDGEPORT IRON WORKS, located as it is in the centre of the iron and brass rolling mills of New England, is advantageously situated for the business carried on, being near the depot and adjacent to the harbor. The articles made here are numerous, and consist of large, ponderous iron and brass rolling mills, and the intricate machinery necessary for the successful production of rubber goods. Power and hand presses and the Van DeWater water wheel, one of the leading wheels in the country. Steam boilers and tanks are a specialty here. This company have been established a number of years and are one of the leading heavy machinery manufacturers in the city. The officers are W. S. Humphrey, Secretary; R. M. Johnson, Superintendent; B. H. Hull, Hydraulic Engineer;—all men of experience, whose services have been of much value towards promoting the manufacturing interests of Connecticut.

BRISTOL, 18 miles from Hartford, and 14½ from Waterbury. A thriving village in a town by the same name, on the Providence, Hartford & Fishkill Railroad. This town was taken from Farmington in 1785; watered by streams flowing into Farmington river. Population, 4,500.

THE BRISTOL MANUFACTURING CO. Incorporated in 1837, with a capital of $75,000, for the manufacture of knit goods, consuming about 10,000 lbs. of wool and cotton per month. They send to market about 1,200 dozen shirts and drawers monthly.

A 6 set mill 150x35 feet, 3 stories, and employ 60 hands. The machinery is driven by a 30 horse power breast wheel.

E. N. Welch, President; J. R. Mitchel, Treasurer and Secretary; Charles A. Steel, Superintendent.

BRISTOL KNIFE CO. commenced business in 1865. The mill is situated about half a mile south of depot, and is 60x20 feet, with L 20x40 feet. Employ 12 hands, and manufacture all kinds of table cutlery. Wm. Clayton, President. Wm. Coppock, Treasurer and Secretary.

BRISTOL BRASS AND CLOCK CO. Incorporated in 1840, with a capital of $230,000. Is situated one-eighth of a mile south of depot. Manufacture forks, knives and spoons; employ 25 hands. Building No. 1 is 100x40, 2 stories; building No. 2, for repairing work, cleaning and packing, is 30 x 70 feet and 2 stories. Their brass works, for manufacturing articles for clocks, lamp burners, &c., is situated about 2 miles from depot.

DARRON MANUFACTURING CO. Incorporated in 1867, with a capital of $12,000; manufacture raw hide dolls' heads and washers; building 40x25, 2 stories; employ 13 hands, and produce about 900 doll heads and 20 gross washers per month.

E. Colt, President; J. H. Way, Treasurer and Secretary; T. E. Darron, Agent at mill.

E. L. DUNBAR, manufacturer of clock springs, commenced business in 1843, about half a mile south of depot; 2 story building 60x26 feet, right wing 30x70 feet, left wing 30x40, building adjoining 30 x 56 feet. Employ 20 hands and turn out about 75,000 springs per month. They derive power from a 30 feet overshot wheel, of about 60 horse power. The business has been carried on since July, 1866, by E. B. Dunbar, son of E. L.

S. E. ROOT commenced business in 1853, manufacturing clock movements and trimmings, marine and eight-day clocks. Building 100x30, 3 stories; employ 30 hands; uses a Woodruff & Beach 30 horse power steam engine, and boilers of the same make.

A. J. SESSION, manufacturer of carriage and trunk trimmings. Commenced business in 1863 in a room 30x 40 ft., hired of S. E. Root. Employs 12 hands.

W. H. NETTLETON, commenced business in 1853. Manufactures clock trimmings; hires room of S. E. Root, 45x30, and employs 10 hands.

N. S. BIRGE, manufacturer of merino shirts and drawers. Commenced business in 1861. A three set mill, situated about half a mile north of depot; produces about 12,000 dozen knit goods per month; use about 4,500 lbs. of wool and cotton; employ 35 hands. Has 2 turbine water wheels of about 40 horse power, and in very dry seasons run a 30 horse power steam engine, of Pitkins, Bros. & Co.'s make, of Hartford. Boilers by Blanchard & Kimball.

E. INGRAHAM & Co., manufacturers and dealers in clocks, and time pieces of every description; commenced business in 1857; occupy two buildings. Movement department, 80 x35, three stories. Setting up and finishing rooms, 100x40, three stories. Employ 80 hands, and turn out about 4,000 clocks per month. Use a breast wheel of 40 horse power. Engine built by Wood & Mann, Utica, N. Y., of 10 horse power.

ATKINS CLOCK COMPANY, established in 1857. Situated west of depot and about 100 rods from Baptist Church. Occupies 3 buildings, mainbuilding for making cases 50x40, 2 stories with ell 20x40; second building, movement department 40x20, 2 stories, with ell 50x20; third building, store house and finishing 40x20, 2 stories. Employs 35 hands and turn out about 15,000 clocks per year. Power derived from a 50 horse power breast wheel.

N. P. THOMPSON & SONS, commenced business 1865. Manufacture carriage wheels. Building 60x25, three stories, and situated one-half mile south of depot. Employ 5 hands, turn out about 50 set of wheels per month. Use overshot wheel of 24 horse power.

NOAH POMEROY, manufacturer of clock movements and regulators. Commenced business in 1845. Building 2 stories, and 70x30, situated half a mile north of depot. Employs 20 hands, and turns out about 2,000 set per month. Uses both water and steam power. Over-shot wheel of 5 horse power; engine six horse power, of Pitkins, Brothers & Co.'s make.

WALLACE BARNES, manufacturer of clock springs. Commenced business in 1857. Building 36x60, two stories; situated about one-quarter of a mile south of depot. Employs 20 hands. Uses a 11 horse power turbine wheel.

THE BONE AND IVORY MANUFACTURING COMPANY was incorporated in 1868, for the manufacture of handles for parasols, umbrellas, knife, scales, &c. Capital $10,000. The works are under the charge of William J. Morgan, Agt. They employ 13 hands. Their works are situated on the bank of the Pequabock river, the waters of which drives a Leffel double turbine wheel, under 14 feet fall, which furnishes the impetus for their machinery.

BRISTOL BRASS AND CLOCK COMPANY. Established in 1850, for the manufacture of brass, German silver, and metal clocks. Motive power furnished from water wheel. Water from the Pequabock river.

BROOKFIELD, 29 miles from Bridgeport and 81 from Pittsfield, on the Housatonic Railroad. The town of Brookfield has two villages, Brookfield Centre and Brookfield Iron Works, the latter being situated in a valley at the station and is the centre of business, the former is situated on an elevated plain 1½ miles south. These two places contain 4 churches and an estimated population of 1,500 inhabitants. This town was taken from New Milford, Danbury and Newton, in 1788, and named after the first clergyman who was ordained when the church was organized, Rev. Thomas Brooks.

WILLIAM L. HOBB commenced the manufacture of wool hats, in Newton, Ct. in 1865, removing here in 1867. His factory being 25x120 feet, 2 stories. Basement used for making, 1st floor for packing room, office and trimming shop, 2d story, carding and finishing. Motive power derived from a 12 horse power 30 inch turbine wheel and 12 horse power breast wheel with 8 feet fall.

F. KEELER, manufacturer of cotton batting, commenced business in 1856. His factory is situated on the west side of the railroad a few rods north of the depot, and is 94x22 feet, 2 stories, engine house on the north east corner of building, 10x30 ft., containing a 15 horse power steam engine with cylinder boiler, of Andrew Brothers' make, New York. His machinery consists of 12 cotton cards, 1 beater, lapper and 1 willow for cleaning stock. He also uses a 20 horse turbine wheel in running his machinery. He employs 12 hands, turning out on an average 1,200 yards cotton batting per day. His stock house is situated along side of the railroad and is 26 feet square.

MESSRS. SMITH BROS. & Co., successors of George W. Smith & Co., who established the manufacture of shears and scissors in 1865. The present firm commenced in 1867. Their factory is 20x36 feet, 2 stories, employing 14 persons

EAST HARTFORD MANUFACTURING CO.,

Manufacturers of

Fine Writing Paper

Of all kinds.

Flat, Folded, Ruled and Plain.

BURNSIDE, CONN.

and making 130 boxes shears and scissors per week; power used, 24 horse turbine wheel, 42 inch, with 14 feet fall.

WILDMAN & WEYMORE, commenced the manufacture of carriers' knives, and in 1860 were succeeded by BENNETT & WEYMORE. This is the only manufactory of the kind in the country. Their building is 50x30 feet, employing 9 hands, making on an average 8 dozen per week. Motive power derived from 2 turbine wheels of 25 horse power combined, with 14 feet fall.

BROOKS, a country station, 12 miles from New Haven and 64 from Northampton, on the Canal Railroad.

BUCKLAND, 82¼ miles from Providence, and 7½ from Hartford. A flag station and Post Office by the same name, on the Providence, Hartford & Fishkill Railroad.

BURLINGTON, a country station 2 miles from Collinsville, and 9 from Plainville, on the Collinsville Branch Railroad.

BURNSIDE, 84½ miles from Providence and 5½ from Hartford, on the Providence, Hartford & Fishkill Railroad. A pleasant village containing 1 church and about 500 inhabitants.

THE writing papers of the EAST HARTFORD MANUFACTURING CO. are acknowledged by the leading merchants and bankers of the country to be superior as to finish and whiteness. Although in operation but a few years, they have made rapid strides in the perfection of their papers, and now rank the first in the market. This company was incorporated in 1856 and has a capital invested of over $100,000. D. A. TUTTLE, President; WM. HAMMER, Sec'y and Treasurer. The works are about one-third of a mile from the depot, on the Hockanum river. Four large buildings are used for manufacturing, and 2 for store house and office. The machinery consists of 3 engines, 400 pounds each, and 4 Fourdrinier 60 inch machine. The motive power is furnished by 3 wheels, the fall being 11½ feet. There are 3 artesian wells 350 and 400 feet deep respectively, from which is obtained the wash water which goes to supply machinery and steam engine. The wells are directly under the works and were bored through a solid rock. The water, contrary to artesian wells generally, is soft and pure as crystal, being the same temperature throughout the year, and discharging 150 gallons per minute. A walk through the establishment convinces one of their superior facilities to produce the finest grades of papers. The bins in which the stock is bleached are 9 in number and contain the stock, $50,000 worth being in process of manufacture continually. This establishment employs 25 males and 30 females, and produces 30,000 lbs. per month of writing papers of all sizes.

This is one of the oldest paper mills in this country. MUNSELL, in his "Chronology of Paper Making," states that, in 1778, "WATSON & LEDYARD, having a paper mill at East Hartford, Ct., wholly supplied the press at Hartford, which published about 5,000 papers weekly, as well as the greater part of the writing paper used in Connecticut and much of that used by the Continental Army."

WATSON & LEDYARD, in connection with Doctor JOHN BUTLER, were proprietors of the mill until the year 1800, when it passed into the hands of HUDSON & GOODWIN, of Hartford, printers and publishers. In 1815, Mr. GOODWIN retired from the firm and the other partner, HENRY HUDSON, continued the business until about 1830, after which the mill was purchased by BOSWELL & KENEY and by them sold to the present proprietors.

HUDSON & GOODWIN and HENRY HUDSON were extensive manufacturers of bank note paper, and acquired a high reputation in this branch of the business. The first Fourdrinier machine used in New England was put up in this mill in 1829.

F. R. WALKER commenced the manufacture of book paper, in 1864; the building is 60x90, three stories, and wing 36x80, three stories, built of wood; employ 26 persons. The manufactory is located on the Hockanum river, with a fall here of 10 feet. A 3 ft. and 5 ft. Tyler wheel supplies the power. The machinery consists of 3 engines and 1 patent engine—the whole capacity being 1,000 lbs. and 1 Fourdrinier machine, the daily production being 3,000 lbs. The present proprietor is successor to HAMMER & FORBES, who have a paper mill near. Salesroom, 20 Spruce street, New York.

HAMMER & FORBES commenced the manufacture of manilla papers in 1866. The main building is 50x60, mostly 2 stories; boiler, wheel and store house, &c., attached. They employ 16 hands; run 3 engines and 2 double cylinder machine with a capacity of 1,800 lbs., producing 2,500 lbs. per day. The works are located on the Hockanum river; the power is supplied by a 4 ft. Leffel and a Cushman wheel; the fall is 18 feet. The works are located opposite the EAST HARTFORD MANUFACTURING COMPANY, about one-third of a mile from the depot.

BURRVILLE, 57 miles from Bridgeport, 5 miles from Winsted, on the Naugatuck Railroad. Population about 100.

MALTBY, HOPSON & BROOKS MANUFACTURING CO., commenced business in 1868. O. L. Hopson, President; D. L. Maltby, Secretary and Treasurer; S. W. Goodyear, Sup't. Manufacture steel drill rods, button hooks and scratch awls. Building 60x30, three stories; employ 12 persons, and have facilities when running, of turning out several gross of button hooks, &c. per day.

CAMPVILLE, is located about 45 miles from Bridgeport, on the Naugatuck Railroad, in the town of Litchfield. A country station.

CANAAN, 37 miles from Pittsfield, 73 from Bridgeport, and 132 from New York. The village has an estimated population of 300, and one church. The town of Canaan was settled in 1738. A ledge of limestone rocks crosses the Housatonic river at this place, about 30 rods in length, causing a perpendicular fall of 60 ft., the whole descent of the river in Canaan is about 130 feet.

CANNON'S. A country station on the Danbury and Norwalk Railroad, about 10 miles from Norwalk.

CANTERBURY, 39½ miles from Providence and 50½ from Hartford, a flag station and town on the Providence, Hartford & Fishkill Railroad; the first settlers of this town were from Dorchester, Mass., in 1690.

CENTRAL VILLAGE, 40¼ miles from Worcester, and 19½ from Norwich, a manufacturing village, on the Norwich & Worcester Railroad.

CENTRAL VILLAGE CO., Tully Bowen and Arnold Fenner, proprietors. They commenced the manufacture of print cloths here many years ago. They occupy 2 mills ¼ mile from each other, situated on the Moosup river, a tributary of the Quinnebaug. No. 1 mill is 100x45, 3 stories and attic, built of brick, with boiler house adjoining 28x48, one story. The power is supplied by two Tyler 5 feet and 3 feet Turbine wheels, the fall being 11 feet. Mill No. 2 is also brick, 140x70, 3 stories, with wing 40x50, 2 stories; this mill is run by two, 48 and 36 inch Tyler wheels, the fall being 13 feet. Run in both mills a few over 8,000 spindles, 219 looms, employ 165 persons; consume 6,500 lbs. of cotton per week, and produce 38,000 yards. The goods are 28 inch, 64 square, 7 yards per pound.

CENTREVILLE, 6½ miles from New Haven, 69½ from Northampton, and 82½ from New York, on the Canal Railroad. Population about 600, —3 churches.

CHESHIRE, on the Canal Railroad 15 miles from New Haven and 45½ from Westfield, contains about 150 inhabitants.

CLINTON, 23¼ miles from New Haven, 26⅜ from New London, 99 from New York and 133 from Boston, on the Shore Line. A village containing 2 churches and 1 hotel. A harbor for small vessels, quite a number of which are owned here.

HULL & STAFFORD, tin and toy manufacturers. This business was established in 1852, revised in 1868, by the above firm. They now occupy 2 buildings, one 100x40 and the other 60x40. They employ 40 hands and manufacture Japan ware and toys of every variety. In connection they have a retail store from which they receive a fair profit.

CLINTON PAPER CO. This company was incorporated in 1867, with a capital of $25,000. They occupy a building 150x25, 2 stories. The power is furnished by 1 turbine wheel. They have 1 steam drying machine. They employ 10 men and manufacture about $6,000 worth of print and manilla paper per month.

COLLINSVILLE, 11 miles from Plainville, at the terminus of the Collinsville Branch.

"Collinsville, town of Canton, Hartford county, is a brisk place. The village is only an overflow of the Collins Company, but the effervescence of industry has driven the foam of new houses up and down the green banks of Farmington river, and here and there the white bubbles have been caught and held aloft upon the steep hillsides. From a single old mill, which David C. Collins and Samuel W. Collins began with, forty years ago, has sprung a great multitude of houses, three churches, two hotels, a bank, schools, libraries and all the auxiliaries of a population of three thousand.

IN that old mill, COLLINS & CO. began as axe makers, with an ambition to make the very best tool that could be produced, regardless of the cost, believing such a tool would inevitably win its way. They were right. It would seem as if the artisans of the blunt, rude axes previously made must have been men of sentiment, forging the tool to execute the purpose of the song, "Woodman, spare that tree!" Collins & Co. held that the axe ought to respond to the needs of the woodman, as much, at least, as to the romance of the trespassing protector of the "shade;" so they made an axe keen as to the edge, ground and polished as to the sloping cheek, solid as to the eye—such an axe as had not before been seen. The success was immediate and immense. From Maine and Canada, from the South, and from the farthest western frontier, from Spanish America, and from the islands of the sea, came a call for the new axes. The fortune of Collins & Co. was made.

In 1834 the Collins Company was organized under a legislative charter. They multiplied their mills until now they stand thick set, twenty-three in number, and so spacious that if they were stretched out on a single floor, they would measure twenty-five feet wide and a mile and a quarter long! They multiplied their wares, turning out, in addition to axes, also hatchets, adzes, mining tools, crowbars, sledge-hammers, the long Spanish cane-knives called matchetes, and many agricultural tools. They increased their capital to $800,000, and have regularly declared a dividend of ten to fifteen per cent.

A large item of their trade for years has been the Spanish tools—knives, axes and matchetes. The semi-Spanish nations of Central and South America were formerly furnished with their weapons and implements from Europe, but they now receive them almost wholly from the United States, and very largely from the Collins Company. They probably found these articles of superior quality—either in stock or finish—to justify the partiality. The tools are of peculiar

pattern, and would not find extensive sale hereabouts. The knives are gotten up in various shapes of ferocity, some of them similar to those seen in the hands of the lowering gentleman who attitudinize in the New York Weekly, and the novels of the sanguinary-marine school. The machetes are quite different from our cane-knives—being as long as swords, and resembling them, but broader at the end. Of these the Collins Company has manufactured more than three hundred patterns, and they are made from the very best of steel.

Here is another tool which not even the sharpest Yankee could guess the use of. It has a handle like that of a knife, and the blade is 18 inches long, and 8 or 10 inches broad in its broadest part, toward the end, and an eighth of an inch thick, ground at the edge, and polished all over. What is it? A weapon of defence or offence, you would say; possibly a heavy pruning knife, or a light butcher's cleaver. Wrong again. This is a Brazilian hoe! The rural operator squats down by a hill of corn, holds the handle in the right hand near the ground as a pivot, and grasps the end of the blade with his left hand and moves it mildly around towards the roots, poking the soil up to the little hillocks! Perhaps this seems very primitive to us, but it is quite as certain that our method seems as foolish to our brethren of the south, for when a Yankee went down with a cargo of our hoes, they refused to tolerate the "awkward thiugs," but forged them into hoes of their own fashion. Of these tools—mainly of the cane machetes—The Collins Company manufacture sometimes more than 200,000 a year.

During the last decade, the Collins Company have "taken hold of the plow," and have brought it to a high degree of perfection. They make it of cast steel—the only one of the kind in the world. The plow is one of the oldest of implements fashioned by the human hand. We can scarcely be certain that Cain had a plow of his own when—a young man of a hundred and fifty—he farmed it on a small scale and without great success in the suburbs of the city of Enoch, "to the eastward of Eden"; but even Adam might have lived to see one, for he exhausted the best part of a thousand years, and doubtless beheld the sparks fly from the anvil of Tubal Cain, this blacksmith descended of the eighth generation. And if they had iron, is it not probable that they made some sort of rude plow?

The first plow of which we have any description, is figured roughly on the monuments of Egypt. It seems to have been a mere wedge, with a short beam and a crooked handle. But Moses and Samuel speak of the plow, and even at that early day it possessed both a coulter and a share, as we learn from their similes. The plow of the Israelites, like the modern plow, was drawn by a yoke of oxen, and it was forbidden by law to yoke an ox and an ass together. The early Greek plow had a wheel. Most of the old rustic authors referred to the plow; Virgil wrote of it in the Georgies; Homer sang of it; and Pliny, Hesiod and Strabo spake of the methods of making it. Varro tells of a plow with two mould boards. The plow of the ancient Britons was very rude; no man was regarded as fit to be a farmer until he could make his own. The custom was to fasten the plow to the tails of the oxen, and compel the beasts thus to drag it through the ground. An act of the Irish legislature was passed in 1634, entitled, "an act against plowing by the taile," which prohibited the cruel custom. The old Scotch plow was thirteen feet long; the iron part proper being over four feet. The Dutch originated the present style, and brought the plow of the last century to the highest perfection. Thomas Jefferson, before he became President, patented an excellent plow, of which he averred that the shape of the mould board was mathematically correct to obtain a perfect furrow with the lightest draft.

In 1860, Mr. F. F. Smith, a shrewd, ingenious blacksmith, made his appearance at the Collins works, told what sort of a plow he thought was needed, and said he believed he could make it. The Collins Company cordially joined him, and the result was a plow cast solid from cast steel, the first ever made. It was found equally adaptable to turf, stubble or fallow land; and those who have used it, aver that it draws easier and takes a laud polish better than any other plow. It costs more, too, but it lasts four or five times as long. Any part can be obtained at any time, if necessary, to renew it. The share is sparpened and drawn out from time to time by any blacksmith. One hundred plows were made, and sold with great difficulty, in 1861. Now, 15,000 a year are made, and the patent is rapidly superseding the unreliable sheet-steel plows on the prairies of the West. Such a sudden capture of the market is almost unprecedented in agricultural implements. These plows have been broken here and there to prove their quality, and pocket knives, corkscrews, saws and cold chisels have been made from the fragments. Of some such malleable stuff must the plows have been made that turned up the valley of Jehosophat; for Joel (chap. iii, verse 10,) calls upon the farmers to forge them into swords. The cast steel plows of Collins Company are now used, not odly in every State of the Union, but in Spanish America, Australia, New Zealand, and in several of the countries of North-western Europe. And still it rapidly extends its peaceful empire

Have we time for a hasty glance through these works that spread their roofs under the hill like a Japanese city? Let us approach, and enter the low-browed Tartarus. Here at the left is the converting furnace where bars of wrought iron are thurst into pulverized charcoal, and in a fortnight come forth bars of steel, having found marvelous properties in the contact. Wrought-iron is merely a pure iron—a chemical simple—it attains the wonderful adaptability and excellence which give it the name of steel, by receiving one half to one per cent of carbon; and on receiving five per cent. of carbon, its form has experienced another radical change, and it has become cast-iron.

Within these inner shops are sweating laborers,—a whole regiment— forging the weapons wherewith the farmer and pioneer are to subdue Nature from her rebellious moods. Here they "Heave-o!" under great derricks, and swing tons of crude metal into place; here they dodge to and fro in the blaze of an awful furnace, grimey suggestive of the Quarters which I trust have been prepared in the nether moulds to swallow up hereafter all who don't beLeve as I do; here they move caressingly about sundry tender worlds; here they preside over a monster like a wool picking machine, into which crawls a wheel with long machetes thickly clasped on its periphery—the monster utters a muffled scream and the dull blades come forth ground and gleamiug; here they crouch before two-score of mighty trip hammers that shout their metalic salutations; here they hover over half a hundred great grindstones, pressing to the rough attrition, axes, plows, hammers, wrenches, hatchets,—stones whose predecessors have burst like bombs, and shot up through the smoky roofs, carrying with them limbs and human heads; here they warily watch huge ovens where tools are baking, and huge tubs where tools are cooling to an amiable temper. A vast machine this is—vaster than the spectral shops, where the Titans forged the shield of Achilles—and into it go every year, 10,000 tons of coal and 6,000 tons of iron, and out of it fly, over States and seas, 5,000 tools a day.

Does the reader know how an axe is made? A bar of heated wrought iron is cut up into chunks and an eye is punched into it by the same movement; then it goes into the bit shop where a piece of steel is clasped and welded to the iron and drawn to the edge; then into the grinding shop; then to the polishing shop; then to the blacking room, where the asphaltum is put on to preserve the head of the axe; then

to the packing room. And while passing through each one of these processes, the instrument is handled by a professional inspector, and if there is a flaw, or if the temper is faulty, back it goes to the beginning. The Collins method is especially characterized by this rigid scrutiny, which assures an excellence remarkably uniform in each completed tool.

The vigilance of inspecting has given such a value to the wares of the Collins Company that their name and trade mark have been extensively counterfeited in Europe; and already thirty English pirates on their stamp have been convicted in English courts, and the profits of years turned over to the defrauded party.

The company is managed by a board of eleven directors, all of whom reside in Hartford, except two. One of these is Samuel W. Collins, who has been President of the company ever since it was established, and whose name and skill first gave eminence to the name. It has never been my fortune to meet him; but I am told that, while maintaining strict discipline, he is very public spirited, and beloved throughout the town. The other is Vice President, Wm. J. Wood, Mr. Collins's enterprising associate.

So much in forty years; how much in forty years more? say, about the year of grace, 1900? What other wheels and shafts and furnaces and forges will be added? What other inventions; what miracles of steam? What other working bees will buzz through this sweltering hive? and what other homes, flanked with rich gardens, will blossom up and down this valley? May it not, until long after the dawn of that century day, be called from the peaceful fashioning of plow and axe; and may the company be as happy in its President then as it is now in that last of the Cheeryble Brothers, who gives to the business his methodical wisdom, and presides with unanimous acceptance, over the village of iron workers."

CORNWALL BRIDGE, 57 miles from Bridgeport, and 53 from Pittsfield. A small village in the town of Cornwall, Litchfield County, situated on the Housatonic Railroad. Population 200.

COS COB, in the town of Greenwich, Fairfield County, 43¼ miles from New Haven, 32 from New York, 155 from Providence and 204 from Boston, on the New York & New Haven Railroad. This village is situated on the Miantus river, about half a mile north of the railway. A drawbridge forty feet in height crosses the river.

DANBURY, 23½ miles from Norwalk, 55 miles from New York, at the terminus of the Danbury and Norwalk Railroad, was settled in the spring of 1685, and its original name was *Pahquioque*. In point of natural beauty and situation few towns in our country will compare with it. It is situated in an undulating valley, living springs bubble forth, and never failing streams flow down from the surrounding hills to turn machinery, &c. In summer, the streets present a fine appearance with their borders of *real* grass and canopy of shade, and within the circuit of a few miles twelve small lakes or fishing ponds invite to a sail or an angling excursion, while game has not entirely left the brakes and woods. Many visitors are drawn here during the hot months to enjoy the pure air and refreshing shade, not to be found in the *bricked in* avenues of the city. From the summit of Mount Tom (or Mootry's Peak) a fine view may be had of Danbury and vicinity. Hills dotted with forests and flocks, and valleys with farm-houses stretch away on every hand, "solitary spires denote distant villages," little lakes sparkle like crystal mirrors, and misty wreaths of floating clouds seem to spiritualize the whole. In the valley at your feet is nestled the village with its numerous spires, and clouds of steam issuing from its factories, in the north stretch the blue hills of the "coal burners" at the east the village of Bethel appears, at the west old Kenosha shows its bosom, and in the south, twenty miles distant, Long Island Sound lies along the horizon, with here and there a sail.

The village of Danbury contains 2 National and 2 Savings Banks, 1 Insurance Company, 1 Gas Light Company, 10 churches and 3 hotels. The Kohanzie Water Works furnish water for the citizens. This place was visited by a freshet in February, 1869, causing the loss of several lives and a large amount of valuable property. Estimated population, 7,000.

It is said to be a sober fact in history that the first building ever erected in this country as a hat shop was built in Danbury, and the first hat ever made in the United States was made in this town!

Be this as it may, certain it is that in the days of the Revolution, when the town was but a hamlet, when provincial's blade was crossed with that of royalist, and a little phalanx of stout hearts were contending for the inborn rights of man; when the seeds of future glorious empire were being planted in the furrows ploughed by the cannon-ball, harrowed in deeply by the iron-shod war horse, the tramp of wheeling and charging columns, moistened and enriched by the generous flow of the life blood of patriots, we find in 1780, Zadoc Benedict engaged in the less chivalric and bloody occupation of making hats in a small red shop, standing near the grounds now the site of the depot, in Main-street. With limited resources and capital, he kept up the fire under his solitary kettle and employed, to work up his "stock," the services of one journeyman and two apprentices, turning off hats at the rate of three per day, or one and a half dozen per week,—two hats being an average for a good workman in a day.

This is according to the statement of some of the oldest citizens, about the first that was done at hatting in Danbury, and although hats had undoubtedly been made here long before this, still this is the commencement of what has since proved an important and extensive trade.

Henry Crofut & Co., manufactrers of fur hats. This company started in business in the year 1868. They are the successors of an old company, who did business here for over 14 years. Henry Crofut having started the hat business in this place in the year 1854. They occupy five buildings in carrying on this large business, which are of the following dimensions:—The first is 60x40 feet, and 3 stories high; the 2d is 30x36 feet, and 3 stories high; 3d, 27x40 feet, 3 stories; the 4th, is 25x36 feet, and 3 stories; 5th, the office, 22x28 feet, and 2 stories built of brick. The other buildings are wooden. They employ 100 men and 50 girls. There is turned out here about 300 dozen per week. They derive their motive power from one 30 horse power engine, Earle's patent, built by the Norwalk Iron Works, and from two tubular boilers.

Among the oldest manufacturers of fur hats in the village of Danbury, may be mentioned E. A Mallory. The main building occupied by him is 100x135 feet, and 3½ stories high. The number of employees average 150. The average amount of work per day, is about 150 dozen. The motive power is derived from one steam engine of 20 horse power, and two flue boilers, made by J. R. Young, Bridgeport, Conn.

Lacy, Hoyt & Co. This company was incorporated in July, 1868. They have a capital of $35,000. They manufacture every variety of fur hats. The building, which is

built of wood, is 100x35 feet and 3 stories high. They employ 120 workmen and turn out about 60 dozen per day.

Danbury Shirt Co. manufactures shirts, collars, drawers and shirt trimmings, for wholesale and retail trade. The business was established by H. B. Fanton. There are two buildings used, one being 26x60 feet, 4 stories high, and the other, used for laundry, being 26x50 feet, and 3 stories high. They employ about 200 hands, and on an average make 1,600 dozen of the above articles per month. The motive power is derived from one steam engine of 12 horse power, 1 upright boiler, and 1 Stanard's water wheel.

S. C. Holly manufactures a fine quality of wool hats. Incorporated in the year 1862. The main building is 36x80 feet and 4 stories high; another is 33x36 feet. The dye house is 22x40 feet, and 1 story high: the engine house is also 1 story high, and is 22x20 feet. This company employ about 100 hands, and manufacture from 125 to 150 dozen per day, using about 1,000 lbs. of stock daily. The buildings are all new. The power is derived from two 30 horse power engines and 2 tubular boilers, make by the Norwalk Iron Works. They have 13 carding machines and manufacture their own felt.

Bartram & Fanton Sewing Machine Co. was incorporated in May, 1865. They have a capital of $350,000. This company manufacture the new and celebrated Bartram & Fanton machine, including several attachments. The button hole and the eyelet attachments, together with some other advantages of this machine, render it a very successful rival to all the older and higher priced ones now in market. This machine received a prize at the Paris Exposition, 1867. This was the only company that exhibited a shirt, of which all the parts were made on the same machine. The American Institute also awarded a prize to this machine. The company was incorporated by H. B. Fanton, W. B. Bartman, B. F. Ryder, and W. D. Taylor. The building, which is brick, is 120x34 feet, and 4 stories high. They employ upwards of 80 hands and turn out on an average, 10 machines per day. The motive power is derived from two turbine wheel of over 20 horse power.

Lacy & Downs. In 1857 Hurlbut & Co. established the business of fur cutting, blowing and dressing furs, and for fur hat forming. They were succeeded in 1864 by the present firm, now occupying for a main building, a structure 80 feet long by 30 feet wide, 3½ stories, with boiler house attached, 12x42, containing a 12 horse engine, made by Hughs & Phillips. This engine in connection with a 10 horse water wheel, drives the machinery. The engine is furnished with steam from a 30 horse boiler, made at the Pacific Iron Works, Bridgeport; also, furnishes steam for heating buildings, &c. Attached to the boiler house is the tacking room, 10x20 feet, with washing room, 15x30 feet. At the present time they are confined to the hat forming and blowing, consequently are not employing more than 8 hands, half the number they usually employ. Produce on an average, 600 hats daily; doing a business of $20,000 per year.

DANIELSONVILLE, 34¼ miles from Worcester and 25¾ from Norwich, on the Norwich and Worcester Railroad. A place of 3,500 inhabitants, containing 6 churches, 1 bank, 2 hotels and 1 newspaper.

The Quinebaug Company was incorporated in 1851, with a capital of $300,000. Isaac Brown, President, M. B. Lockwood, Treasurer. The main mill is 310x47, 3 and 4 stories with two wings 155x47 each, one 2 stories, another 5 stories with attic for the whole. The mill is built in the shape of a cross. The original mill is built of wood 72x31, 3 stories with ell 30x25, 2 stories. Run 30,000 spindles, 700 looms. Employ 450 persons; consume 1,287,000 lbs. of cotton per year, producing 5,500,000 yards of fine sheetings and prints. Use No. 64 and 80 reed, and 96 and 64 picks. They use 2 Jonval, 5 feet and 8 feet, and 3 Upham wheels 7, 5½ and 4 feet; the fall is 26 feet.

Abner Young & Son commenced the manufacture of women's boots and shoes in 1864, the business being established by the father in 1853. The main building is 30x50, 3 stories; another 25x40, two stories, both built of wood. Employ 150 persons, and produce 2000 cases per year.

Danielsonville Company, Daniel Remington and Son, D. G. Sherman and William Foster, proprietors. The present proprietors commenced here in 1864, and occupying 2 wooden and 1 stone mill, for the manufacture of print cloths. In 1868, a new and commodious mill was built of brick, 220x78 feet, 4 stories, with wing 40x60 feet, 2 stories. The capacity of the mill is 16,000 spindles, 350 looms. The power is supplied by one 6 feet Collins' turbine wheel, the fall here being 23 feet. They will take possession during the present summer, and do not intend to run up to the full capacity for a year, commencing with 200 looms. The old mills will be vacated entirely and let to other parties for carpenters' shops, &c. Different kinds and qualities of print cloths and cotton goods will be made here. They use now 28 and 30 yarn and 64 picks.

DARIEN, Fairfield Co., 35 miles from New Haven, 41 from New York, 147 from Providence and 195 from Boston, on the New York and New Haven Railroad.

Until 1820 Darien was a parish in the town of Stamford. The soil is excellent, and well adapted to tillage and grazing. The principal village is half a mile south of the station, on the Goodwife river. This place was rendered memorable as the scene of conflict during the Revolution.

On Sunday, the 22d of July, 1781, during divine service, a party of British troops surrounded the meeting house at this place, and made the whole congregation prisoners. The males were tied, two and two, and the Rev. Moses Mather, D. D., a man distinguished for his learning and piety, placed at their head. They were marched to the shore, taken to Long Island, and afterwards to New York, where they suffered a cruel imprisonment. Some of them never returned.

DAYSVILLE, 31 miles from Worcester, and 28¾ from Norwich, on the Norwich & Worcester Railroad. A manufacturing village.

S. & H. Sayles occupy a mill here for the manufacture of fancy cassimeres, commencing in 1864. It is 170 x 40, 3 and 4 stories, built of brick, with boiler and store house adjoining 70x50 feet, 3 stories, built of stone. They run 6 sets of woolen machinery, 36 narrow looms, consume 40,000 pounds of cotton per month, and produce 20,000 yards. Employ 100 persons. The mill is situated on Five Mile river. A Tyler 5 feet turbine wheel supplies the power, the fall here is 16 feet. About one mile from the Post Office, they run another mill 100x36, 3 stories and basement, built of stone. Run 4 sets of woolen machinery; employ 65 persons; consume 25,000 pounds of wool per month, and produce 14,000 yards of cassimeres. The mill is run by a 48 inch Tyler wheel; the fall is 14½ feet; located on the Whitestone river.

The Williamsville Manufacturing Co. was incorporated 1859. Capital $50,000. Samuel Foster, President; S. and W. Foster, Sec'y and Treas'r; Wm. A. Atwood, Superintendent at mill. The mills are situated 1¼ miles from Daysville station, on the Norwich & Worcester Railroad. They occupy

IRON AND STEEL WORKS,

BIRMINGHAM, CONNECTICUT.

Manufacture all styles of

CARRIAGE, CART, TRUCK AND OMNIBUS

SPRINGS,

From the best brands, English and Sweeds steel. Also all styles of Long and Short Bed Axles, solid and loose Collars. Also Merchants' Iron Squares, Rounds, Flats, Ovals, and the celebrated "Derby" brand of Horse, Ox and Mule Shoe Shapes.

THOMAS ELMES, Secretary.

2 mills connected with each other. Run 12,500 spindles and 264 looms, manufacturing $\frac{7}{8}$ shirtings and $\frac{4}{4}$ fine sheetings 80x100. They employ 150 persons and turn out 45,000 yards per week. The celebrated Williamsville sheetings are made here. Office, 26 Canal street, Providence. R. I.

DERBY, 14 miles from Bridgeport. A station and town by the same name on the Naugatuck Railroad. The Indian name is Paugasset, being purchased of the Indians, and incorporated in 1675.

Birmingham is situated in the same town, directly across from the station, and at the junction of the Housatonic and Naugatuck rivers. The village of Birmingham is situated mostly in a valley, hills rising to a considerable height upon the eastern and western sides. This place is 14 miles from Bridgeport, 20 from New Haven, 50 from Hartford, at the head of navigation and tide flow. There are 4 churches, 1 national and 1 savings bank, and an estimated population of 3500. Vessels drawing 10 feet of water can come up here.

NAUGATUCK VALLEY is the head centre of New England for iron and brass rolling mills, and the working of metals generally. Prominent among the many establishments in this valley, is the IRON AND STEEL WORKS of this place. They are under the management of Thomas Elmes, Esq., Secretary. They manufacture carriage, cart, trunk and omnibus springs, and all styles of axles, shafts, &c. They employ a large number of persons and do a very extensive business.

THE BIRMINGHAM IRON FOUNDRY. This company commenced business more than a quarter of a century ago, and has worked its way upwards until now it occupies a position second to none in the country. The business of the company is not confined exclusively to that of casting, as the name implies, but manufacture machinery of the heaviest order, having every facility for carrying on after receiving an order, any class of casting or machinery, from the making of the pattern to that of casting and finishing the most ponderous and intricate machinery. They have every facility for carrying on successfully their class of industry, which places them where they are, with but few successful competitors. The whole ground is in extent 400x225 feet, with a nice fire-proof building 24x114 feet. Have in first the office, then draughting room, store room for patterns, &c. Beyond this comes the foundry, which is 80x100 feet, containing two immense cupola furnaces. It is stated that, not long since, this company cast a pair of shears for the Pacific Rolling Mill, in San Francisco, the total weight being about 20 tons, the lower jaw being about 10, and the upper with attachments about the same. The company make a specialty of casting "chilled rolls," which are made by casting into cold metal moulds, thereby suddenly chilling the surface and rendering it as hard to a considerable depth as the hardest steel. During the year, 3,000 tons of bar and old iron were used, turning out about 10 tons casting per day. Molding sand and clay 600 tons. Consuming 800 tons of coal; employing in all 125 hands. The machine shop is a 3 story building 70x100 feet, with an L 45x100 feet. Here the chilled rolls are turned and polished, being so nicely done that, while they are running, they scarcely allow any light to pass through.

This Company have finished an immense mill for the rubber works at Naugatuck which will weigh complete, about 25 tons. They also manufacture an excellent mill for railroad iron. They name it "Three High Mill," so called from its having three immense rolls one above the other, consequently allowing two rails to be run through at once. They have sent one to the Pacific Rolling Mill, San Francisco. It occupies a space of 43 feet and rolls bars 30 feet long and turning out a total weight of 60 tons per day. Another is in use at Rome, N. Y., for the manufacture of rails for the Rome and Watertown Road. The cost of the mill was $45,000. Next comes the forging shop 25x90. The brass foundry is a distinct branch of manufacture in which the company are prepared to do any kind of work as well as in their other branch of business. The axle department is another branch of their business, though kept entirely separate from others. In this branch the company have won quite a reputation for finishing an excellent quality of work. In the making of axles they use 50 tons of iron per annum. This company have in their machine shop a monstrous planing machine weighing 25 tons and having a cut 6 feet square and 24 feet long. There is very much that is interesting which could be said in reference to this model company, but enough is given to show its resources. Royal M. Bassett, President, Theodore S. Bassett, Secretary.

The BIRMINGHAM AXLE COMPANY was established in 1865

Birmingham Axle Company,

BIRMINGHAM, CT.,

Manufacturers of

LICHT CARRIAGE AND COACH MAIL PATENT, HALF PATENT, AND TAPER

AXLES,

Made from Salisbury and Low Moor Iron, and Steel Converted.

Welded Collar, Half Patent and Taper AXLES,

AND

Common Axles of all Sizes.

R. M. BASSETT, *Pres't.* CHAS. T. WELLS, *Sec'y.*

Capital $150,000, for the manufacture of axles. They employ 15 persons and produce 150 set of axles per week. This company though established but a few years, have a reputation second to none, for producing reliable work.

W. E. BURLOCK & CO., manufacturers of hoop skirts, commenced business in 1862. They occupy a two story building 130x30 feet. Employ 100 hands, and produce $700 worth of goods daily, and do a business of $200,000 annually.

EAGLEVILLE, 36 miles from New London and 64 from Grout's Corner, (now Miller's Falls.) A station in the town of Mansfield, on the New London & Northern Railroad.

The village of Eagleville, situated in the town of Mansfield, is owned exclusively by Mr. John L. Ross. It contains between two and three hundred inhabitants; has a post office, depot, store, saw mill, and a cotton factory of 100 looms. The goods manufactured are sheetings, of which between 8 and 900,000 yards are produced per annum. The power is supplied by a 90 horse power water wheel, made by Chace & Luther, under 12 feet fall.

EAST BERLIN, 5 miles from Berlin, and 5 from Middletown. A country station on the Middletown Branch.

THE ROYS & WILCOX CO. was incorporated in 1854, being successors to Roys & Wilcox. This company manufacture tin tools and machines. Their buildings are 100 x 33, 2 stories, with L 47 x 32 feet, 1 story, used as a finishing shop; forging shop 148 x 33 feet, 1 story; iron foundry 57 x 40 feet, 1 story, and several out buildings adjoining. The works are driven by a turbine wheel, the manufactory being located on the Mattabesett, a tributary of the Connecticut river; also by a 25 horse power engine. A new one is soon to be put in, of about 75 to 100 horse power.

THE AMERICAN CORRUGATED IRON CO. are incorporated under the laws of Massachusetts, the office and show room being located at Springfield, the manufactory at this place. The company was incorporated in 1860, with a capital of $100,000. The buildings are—one 120x40 feet, and two 25 x60 each, located at the depot. The works are driven by a 12 horse power engine. This company own and control 11 different patents relating to iron buildings. This business is yet in its infancy and bids fair to be one of the most profitable and extensive in the country. Employ twenty-five persons. The officers are James A. Rumrill, President; Geo. Dwight, Jr., Treasurer; J. W. Hoyt, Secretary; F. Roys, Superintendent.

EAST HARTFORD, 2½ miles from Hartford, 87½ from Providence, on the Providence, Hartford and Fishkill Railroad. A village on the opposite side of the river from Hartford. The first powder mill in this country was erected in this vicinity. The main street of the village is shaded by stately elms.

EAST HAVEN, 5 miles from New Haven. A country station on the Shore Line, quiet and retired. The first iron works in the State were established here. 2 churches.

EAST LYME, 42½ miles from New Haven, 7½ from New London, 119 from New York, 113 from Boston, on the Shore Line. A thriving village at the mouth of the Niantic river, on Niantic Bay. A good view of the Sound can be had from here. Two churches and 2 hotels.

EAST RIVER, 17½ miles from New Haven, 32½ from New London, 94 from New York, and 138 from Boston on the Shore Line. A stream of water here called the East River, separates the towns of Madison and Guilford.

EAST THOMPSON, a country station of 9 houses, located on Five Mile river, 53 miles from Boston and 17 from Southbridge, on the Boston, Hartford and Erie Railroad. The road has a branch from here built to Putnam, on the Norwich and Worcester Railroad.

THE only manufacturer here is LYMAN SHELDON, who commenced the manufacture of shingles in 1863. He employs 3 men and produces 8,000 shingles per day. The fall here is 25 feet, with opportunity to make 40 feet with but little outlay.

ENFIELD BRIDGE. A Flag station, about 2 miles from Thompsonville, and 3 miles from Warehouse Point, on the New Haven, Hartford and Springfield Railroad.

FAIRFIELD, Fairfield County, 22½ miles from New Haven, 54 from New York, 134½ from Providence, and 182 from Boston, on the New York and New Haven Railroad.

One of the country seats of Fairfield County, Danbury being the other. It is built on a fertile plain, east of the railway, about half a mile from the Sound. The principal street is quite broad, running nearly parallel with the railway, and has many handsome and commodious residences. A fine Congregational Church has recently been erected near its centre. Mariere Pavilion, in the southern part of the village, is a large hotel, and favorite watering place. Black Rock village, a little to the east of Fairfield, has one of the finest harbors in the State, with the exception of that of New London. North of the village, near the middle of the township, is Greenfield Hill, the scene of President Dwight's poem of that name. The population is 4500. Fairfield village was burnt July 7th, 1779, by General Tryon, who sailed the day before from New Haven. Two hundred houses were on fire at once, and a terrific thunder-storm arising during the conflagration, produced a scene of terrible grandeur.

The Indian name was Unquowa.

FAIRHAVEN. A station on the outskirts of New Haven, 2 miles from the city depot, 78 miles from New York, and 154 from Boston. A place of about 4,000 inhabitants, situated between the Mill and Quinnipiac rivers. A bridge 900 feet long is built across the West river. About 50 vessels are owned in this place, employed in the oyster business; nearly a million kegs are sold here in one year. The village has five churches, and two hotels.

FAIR HAVEN KEG AND CAN CO. was incorporated in 1861 with a capital of $100,000. Thomas H. Brooks, President, O. A. Monson, Secretary and Treasurer. They occupy a building 60x30 feet, 3 stories with store house adjoining. Employ 40 persons; the annual production being 600,000 kegs. The power is furnished by a 20 horse power engine with one tubular boiler. This company is located foot of Ferry street, and does a business of about $50,000 per year.

BROWN & BARNES, commenced the manufacture of Merriman's patent bolt cutter and general machinery, in August, 1868, being successors to H. B. Brown & Company, who commenced business in 1865. They removed from New Haven to the foot of South Front street, in this place, in November, 1868. Their building is 50x28 feet, 3 stories, with shop 50x25 feet, 2 stories, adjoining. They employ 15 persons; the power is furnished by a new 35 horse power engine with one boiler, the engine made by the New Haven Manufacturing Company.

KELLOGG & IVES, machinists and ship smiths and manufacturers of oyster, powder and butter kegs on South Frank street. Commenced here in 1865. They occupy a main building 30x80, 3 stories, with 2 store houses 25x125, 3 stories. They employ 50 persons, the annual production being 100,000 powder and 400,000 oyster kegs. The motive power is furnished by a 25 horse engine, built by M. & T. Sault, with one 40 horse tubular boiler. This concern has a water front of 200 feet, and do a business of $100,000 per year.

FALLS VILLAGE, 67 miles from Bridgeport and 43 from Pittsfield. A small village in the town of Canaan, Litchfield county, on the Housatonic Railroad and river; contains an estimated population of 460, and 2 churches.

AMERICAN MARBLE AND LIME CO., quarriers and manufacturers of marble and lime of superior quality, commenced business in 1866. They occupy a saw mill, 42x90 feet, and other buildings in proportion; and employ from 30 to 50 hands.

FARMINGTON, situated on the Farmington river, 1½ miles from depot on an elevated plain. Has a population of about 200 and 1 church. It is 30½ miles from New Haven and 45½ from Northampton, on the Canal Railroad.

FIVE MILE RIVER. A flag station on the New York and New Haven Railroad. 33½ miles from New Haven, and 42½ from N. York.

FORRESTVILLE, 1½ miles from Plainsville, on the Hartford, Providence & Fishkill Railroad, and 15½ miles from Hartford. About 500 inhabitants.

LEROY HUBBELL, manufacturer of clock movements, commenced business in 1848; occupies a building 30x60, with L 18x60 feet, 2 stories; employs 30 hands, and doing business of about $40,000 per year. Mr. Hubbell was the originator of the lever movement.

L. S. GLADDING & Co. commenced the manufacture of carriages in a building 46x70 feet, with L 20x50 feet, 3 stories; employ 20 hands.

J. S. CORBAN commenced business in 1860, manufactures light carriages and sleighs. Building 60x30 feet, 3 stories; employs 15 hands.

E. N. WELCH MANUFACTURING CO., manufacturers of eight-day and thirty-hour clocks and movements. They now occupy 4 buildings, and employ 175 hands, turning out about 15,000 clocks per month. E. N. Welch, President, G. H. Mitchell, Treasurer and Secretary, J. H. Welch, Agent.

WELCH SPRING CO., manufacturers of all kinds of clocks, especially fancy. Commenced business 1868, in a 2 story building 30x50 with ell 30x50 of three stories. Employ 50 hands.

GEORGE W. BROWN & CO., manufacturers of all kinds of metal toys. Established business in 1858, situated about ½ mile north of the station. Occupy a 3 story building 40x100 with one story office adjoining 24x16. Employ 100 hands.

FRANKLIN, 20 miles from New London and 7 from Norwich. A station and town on the New London and Northern Railroad, New London County. Shetucket river separates this town from Lisbon. The surface of the town is uneven; the soil is a gravelly loan, more fit for grazing than tillage.

GAYLORDSVILLE. See Merwinsville.

GEORGETOWN. A country station on the Danbury and Norwalk Railroad. About 12 miles from Norwalk.

This little village contains 1 wire factory, 1 wire cloth, 1 wire goods, 1 glue and 1 curled hair manufactory. They

are all owned by Gilbert Bennett & Co. The present business was established in the year 1825. Their establishment is in no direct communication with the railroad. The post-office address is Georgetown. The main building is over 400 feet long, and 3 and 4 stories high. The wire mill is 25x97 feet, and employs about 100. The number of looms is 30 for wire weaving. The buildings are partly wood and partly stone. In the manufacture of wire, this company use 2 tons of iron per day, half of which they use in making sieves, wire netting, and all the various kinds of wire goods, the other half being sold. The motive power for carrying on their various branches of work, is furnished by 1 steam engine, of 15 horse power, and 2 boilers, 1 cylinder and the other a flue boiler. In addition to the engine, there are 5 water wheels, 2 overshot, 1 Reynolds and 2 Stevens. This company are doing a large business, making glue and curled hair.

Granby, situated on Salmon Brook, 46½ miles from New Haven, and 27½ from Northampton, at the terminus of the Canal Railroad and commencement of the New Haven and Northampton Railroad. The village is situated about a mile from the depot and contains about 150 inhabitants.

Greenwich, Fairfield County, 31 miles from New York, 44¾ from New Haven, 156 from Providence and 205 from Boston on New York & New Haven Railroad.

The settlement of the town commenced in 1640, and was incorporated, by Stuyvesant, the Dutch governor, at New York, in 1665. It is watered by Byram river, the boundary line between the town and the State of New York. At the outlet of Byram river, on the New York side, is a place called *Sawpits*, a noted landing place on the sound, 28 miles from New York. The town has two large churches: the Congregationalist and Episcopal, and also many fine residences. West Greenwich, on Horse Neck, is celebrated as the scene of a battle between the Dutch and Indians, in 1646. The action was long and severe, both parties fighting with much obstinacy. The Dutch, with much difficulty, kept the field, and the Indians withdrew. Great numbers were slain on both sides, and the graves of the dead, for a century or more, appeared like a number of small hills.

Putnam's Hill, a little east of the station, is celebrated for the daring exploit of General Putnam, who descended this precipice when pursued by the British dragoons, during the war of the Revolution. The hill is about a hundred feet high, and quite steep. Stone steps were once constructed for the accommodation of people attending the church on the summit, but have since been removed.

The Greenwich Iron Works, were established in 1834, for the manufacture of round and square rods, &c. They employ 35 hands and produce 6 tons daily, and do a business of $100,000 per annum. They use water power and have a fall of 25 feet.

Groton, 126 miles from New York, 106 from Boston, on the New London, Stonington & Providence Railroad, at the month of the Thames river, in the harbor of New London and opposite to that city on a commanding elevation. The lands in the town of Groton are generally hilly and rocky, with some fertile tracts on the margin of the Thames. Groton will ever be memorable as the theatre of the most important and interesting military transactions which have taken place in this State.

The monument on Groton Heights in commemoration of the destruction of Groton and New London, by the traitor Arnold, with which every American is familiar, has its foundation stone 130 feet above tide water, the monument being 127 feet in height, or 257 above the river, constructed of granite, of which there is an abundance in the vicinity, at a cost of $11,000. This town is the birth place of John Ledyard, the noted African traveller, and of N. Daboll, the author of Daboll's arithmetic, "of ye olden time."

Guilford, 15½ miles from New Haven, 34½ from New London, 92 from New York and 140 from Boston, on the Shore Line Railroad; called by the Indians Menumketuc. This village, located in a town by the same name, is pleasantly situated 2 miles from Long Island Sound, and is quite a summer resort. This is the birth place of Fitz Greene Halleck, one of America's most distinguished poets. He died 1868. The oldest house in the United States is located here, erected in 1640.

J. W. Schermerhorn & Co. occupy two 2 story buildings 40 x 70 feet and 26 x 36 feet, respectively, with an L, which makes an aggregate of 15,000 feet of floor. They employ from 40 to 50 hands, manufacture school furniture and apparatus. The machinery is run by steam power. They also have a publishing house 14 Bond street, New York.

J. S. Spencer's Sons, manufacturers of light castings, made from Grey iron, such as locks, scales, butts and light machinery, commenced business in 1857. They occupy several buildings, the main one of which is 120x40 feet; employ from 25 to 30 hands and do a business of $50,000 annually. They use an 8 horse power engine, made by K. Bull. The manufactory is situated about 1 mile from tide water, where vessels come in drawing 7½ feet water, at high tide.

Hamden Plains, 4 miles from New Haven, and 72 from Northampton. A country station on the Canal Railroad.

Hancock, 26½ miles from Hartford and 3½ from Waterbury. A country station on the Providence, Hartford and Fishkill Railroad.

Hartford, 36 miles from New Haven, 26 from Springfield, 90 from Providence, 32½ from Waterbury, 110 from New York, 124 from Boston, 336 from Montreal, 126 from Albany, and 50 miles from Long Island Sound. Is located on the west bank of the Connecticut. The Indian name of Hartford is Suckiag. The city was incorporated in the same year as Middletown and New Haven, 1784. It is divided by Mill river, and is rather irregularly laid out. Hartford is very advantageously situated for business, is surrounded by an extensive and wealthy agricultural and manufacturing district, including enterprising villages and cities. The Providence, Hartford and Fishkill Railroad, and New Haven, Hartford and Springfield Railroads centre here, and daily lines of steamers to New York, make it easy of access. The city is well built, and contains many elegant, public and private edifices. The State House and Court House being the most prominent of the public buildings. Besides these there are the Hartford Hospital; the American Asylum for the Deaf and Dumb, the latter incorporated 1816; the Wadsworth Athenæum, &c., &c.

The literary and educational institutions here, are numerous; Trinity College, incorporated 1823, under the direction of the Protestant Episcopal Church, the grounds occupy about 14 acres. The old "Charter Oak," the history and associations of which every true American is familiar, was blown down in a gale a few years since. The first printing office here was started in 1764, by Thomas Green, who at that time commenced the publication of the Connecticut *Courant*. This printing office was the pioneer of as extensive and well appointed printing houses as in any city of twice its size in the Union. Book publishing is carried on very extensively. Hartford is also the leading Insurance city in the United States, there being upwards of 30 companies, most of them occupying large and elegantly built buildings of their own, which add much to the appearance of the city.

The shipping interests are quite important. Sailing vessels and steamers connecting with Philadelphia, Baltimore, Albany, New York, Boston, Providence, and other large cities, north and south.

The Woodruff & Beach Iron Works. The names of Woodruff & Beach are closely allied to many of our mechanical successes. Twelve years ago, they began the manufacture of their present specialty—steam engines, of the pattern now bearing their names. They first started in 1842, in the usual line of machine work. Their works here, cover 6½ acres, and a full force of 400 hands is employed, turning out three engines every fortnight. The first building is their office, which is a model of beauty. It is finished in walnut, chestnut and marble, with as neat an appearance as architect or artist could design and execute. It is here one receives first impressions of that policy which aims at the combination of the beautiful with the useful, and to make the machine shop or moulding room as conducive to the comfort and general welfare of their laborers, as the library at home. Pleasant relations between firm and hands are regarded as absolute essentials, and a few dollars invested, to give an office or workshop the finish agreeable to the eye, are believed to be investments which will result in substantial gain to themselves.

The main foundry of the works is 230 feet long by 60 wide, connected with which is a second and older one, 30 x150 feet. The machine shop is 325x50 feet with ell, including blacksmith shops 50x100 feet. The main ell is 45 feet wide and of two stories. Next in order come two boiler shops; one 147x50 feet, and the other 122x60 feet. A three-storied building, for patterns and erection of engines, 100x52 feet, inside, with a storage-house of three stories, 120x40 feet, complete the list of the main buildings, adjacent to which are all the sheds and shops necessary to a full operation of the concern. The company have a river frontage and wharfage of 500 feet, and two heavy shears, capable of lifting 100 tons with the needed cranes, have been put up on the wharf, in order to ship enormous weights with the utmost dispatch and facility.

Of the Woodruff & Beach engine, it would be but a tiresome repetition of common descriptives, to say that their entire principle and finish give them second place to none, and this remark can hardly meet objection, so heartily is this opinion accepted by those conversant with the generality of American manufactures. The firm have had enormous contracts from the Government, some amounting to an aggregate of a million and a quarter dollars, and it is but just to conclude that, when the engineer of the "Manitou," in our Boston navy yard, says, as he has said of her first operation under steam, that her engines worked faultlessly, such mechanism must be regarded as unsurpassed. Where accuracy and ease of action, perfect regulation, simple construction and economy of fuel are combined, no deficiency exists to be filled. In the equipment of their machine shops, are the largest planer and lathe in this country; the former built at an expense of $36,000, originally to facilitate government labor.

In conclusion, the Woodruff & Beach engine combines proportion with perfection of outline; few parts contribute to immense power; simple construction yields a large percentage of economy, while the whole works without the heavy thud and vibration peculiar to many constructions.

An economy of fuel is attained by their patented cut-off, of which the manufacturing public will cheerfully bear details. This cut-off is made by the automatic action of the governor upon the adjusted cam, which is thrown more or less out of centre with the spindle of the governor, as the rotation of the balls is more or less rapid, the eccentricity of the cam determining the amount of steam admitted to the cylinder. The cam attains this effect, since it consists of two parts; a hollow shell, with a part of one end formed into a cam proper, and throughout its entire length a feather acts on a spiral groove, to regulate its pitch or eccentricity.

The inside piece is a hub, which exactly fits in the hollow of the cylinder, and has a socket into which the spindle of the governor is screwed, the other end forming a journal or bearing, with a bevel wheel on its extremity, to convey motion from the crank shaft gearing to the governor and cut-off. There is a hole throughout the length of the inside piece, which is continued through the spindle of the governor, and which contains the rod that connects the cam with the governor. This hole is eccentric to the outside surface, but is concentric with the collar and with the governor rod.

Both pieces are connected together by a feather, one piece of which is of a spiral form, and the other is a straight or rectangular piece, the two being connected together by a stub on the rectangular piece, which fits into a hole or bearing in the other or spiral piece, so that the latter can turn on the stub and accommodate itself to the groove in which it has to work. The spiral part of the feather works in a spiral groove in the inside of the shell, and the rectangular piece works in a straight groove in the inside of the hub, the inner part of the rectangular piece being fastened to the governor rod, so that the feather is permanently connected with the governor.

When the several pieces are put together the cam is complete, and motion is communicated by gearing from the crank shaft, as we have before described. With the operation of such a governor, it is impossible to use a pound of steam more than is absolutely demanded by the work to be accomplished

Colt's Patent Fire Arms Manufacturing Co. The plan of the buildings of the company is the letter H. The legs of the H are 500x60 feet; the western leg is built of brick with wooden floors and beams, and is 3 stories high. The eastern leg is four stories high, and is built fire-proof. The motive power in the western leg is 2 horizontal engines of about 60 horse power each. In the eastern leg the motive power is 4 vertical engines of about 70 horse power each. The connecting building is about 300x50 feet, and has 3 stories. The company manufactures all articles of metal, but especially firearms and machinery for the manufacture thereof. Its capital is $1,000,000. W. B. Franklin, Vice President and General Agent.

The Sharp Rifle Manufacturing Co. located on Rifle Avenue in the western part of the city, was incorporated in 1852, with a capital of $125,000. James T. Ames, President, John C. Palmer, Treasurer, S. H. Green, Secretary, R. S. Lawrence, Superintendent and Master Armorer. Their first building was built in 1853, being 65x160, of brick, 2 stories. The necessities called for by the war and the want of more room to fill their large contracts given

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Is published at the same office, every Friday Morning. It is a very large weekly, carefully made up of the most valuable matter appearing in the daily, and accompanied every other week by an eight page literary Supplement. Its circulation, now very large and constantly increasing, extends to all parts of the country, making it one of the best advertising mediums in New England.

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them by the United States Government, obliged them to build another main building in 1863, built of brick 43x208, 3 stories, to which have been added from time to time six forge shops, covering an area of about 35,000 square feet, also a boiler house 50x52 of brick, 2 stories, engine house 24x48, 1 story, trip hammer shop 50x57, 1 story, inspection room 18x25, 1 story, brick shed 15x96, 1 story, store house 25x40, 1 story, planing room 14x36, 1 story, browning 23x 45, 1 story, polishing, 36x60, 2 stories, tempering shop 16x 30, 1 story.

This company manufacture Sharp's rifles and gun machinery, employing 100 persons, and, during the war, employed 700. Their motive power is furnished by a 250 horse power Corliss patent engine and make, with 6 tubular vertical boilers, the capacity of the works being 150 guns per day. This company made 100,000 guns for the United States Government during the war, as well as 6,000 for England and 20,000 for the governments of Peru, Chili, Mexico, China, Japan, German States and Spain. The manufacture of these rifles was commenced near Philadelphia by one Nippes, then continued by Robbins & Lawrence, Windsor, Vt., and from thence to its present location, in 1852. Mr. Sharp resides in Philadelphia, and receives a royalty, not being connected with the company. Since this invention has been in the hands of this company, it has been perfected and brought to its present excellence. The company are now changing the guns made by them during the war for the United States, from a linen to a metallic cartridge. The arms having all passed through the war and brought back, in good order, to be changed by order of the government.

PHŒNIX IRON WORKS, 54, 56, 58 and 60 Arch street. George S. Lincoln & Co., Proprietors. This company commenced this business in 1834, which has slowly and surely increased, so at the present time, they occupy 4 buildings as follows: No. 1, the main building being 135x40 with ell 100x25 for a machine shop; No. 2, 135x50 with ell 80x50, used as a foundry; No. 3, 40x40, 2½ stories, for the manufacture of iron railing, fences, and builders work generally; No. 4, 96x25, 1 story, blacksmith's shop. This company employ on an average 100 persons, manufacturing machinists' tools and general machinery. The Colt Patent Fire Arms Company, was furnished with the machinery that enables them to manufacture such reliable arms, by this company. They make as a specialty, Gillespies' Patent Improved Governor for water-wheels. A 25 horse power engine built by Woodruff & Beach, furnishes the power for three works.

P. JEWELL & SONS, Hicks corner Trumbull street, manufacturers of leather belting. This business was established in 1847, by Pliny Jewell, employing one man. It has since grown to be the largest leather belting manufactory in the world, occupying a 5 story brick building 110x44 with ell 50x25, 4 stories. This company is now composed of Marshall Jewell, Pliny Jewell, Jr., James E. Coleman and Chas. A. Jewell, the founder P. Jewell, Esq., having retired in 1866. They employ 60 persons and cut up 100 whole hides per day. The power is furnished by a Woodruff & Beach 50 horse power engine with 2 tubular boilers. The leather for this concern is tanned at their tannery at Detroit, Michigan, which is capable of tanning 500 hides per week.

SMITH, BOURN & Co., Asylum street. This company was established in 1794 for the manufacture of harness and saddles. They now occupy a building 55x175 feet, 4 stories; employing 150 persons. This company had a great southern trade during the 20 years previous to the war, but of late have given their attention to trade west.

S. C. KENYON & Co., occupy a floor 80x45, at 130½ Asylum street, for the manufacture of ladies', misses' and children's shoes. Employ 40 hands.

H. A. GAY & Co., 63 Pearl street. Commenced the manufacture of carriages in 1868, in a 3 story building, 100x30 with ell 30x30, 2 stories. Employ 10 persons.

PITKIN BROTHERS & Co., 152 State street, commenced the manufacture of machinery and steam heating apparatus in 1850. They have a store 20x122, 5 stories; store house 35x100 feet, 2 stories; shop 50x136, 5 stories with ell 35x 40. This company employ 75 to 100 men, and have a 50 horse power engine, with 1 horizontal tubular boiler made by themselves.

THIS city is the home and residence of the pioneers that introduced into this Western World the manufacture of silver plated spoons and forks. It is here (only a few rods from the Post Office,) in this enterprising city of "Charter Oak" notoriety, that we find the works of the celebrated WILLIAM ROGERS MANUFACTURING CO. (whose stamp on spoons and forks has become a household necessity). This company employ from 75 to 100 hands, in the manufacture of superior plated goods. They make spoons and forks a specialty, and

WOODRUFF & BEACH IRON WORKS, HARTFORD, CONN.

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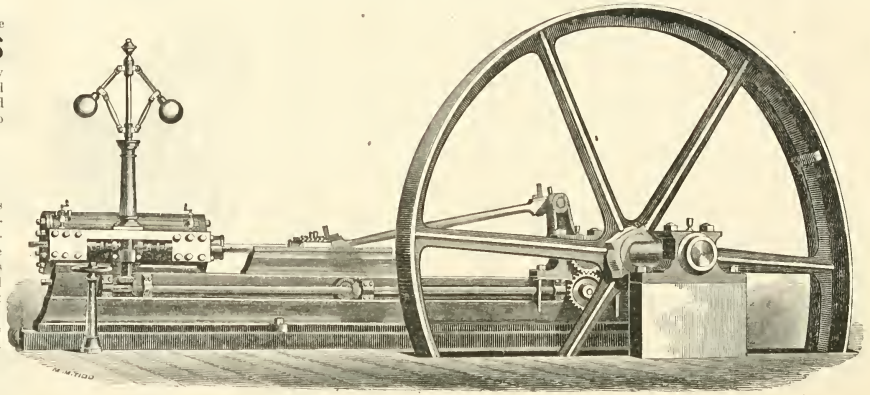
ENGINES

in the United States steam sloops of war, "Mohican," "Kearsage," "Manitou," "Minnetonka" and "Piscataque," the United States steam gunboats "Cayuga," "Pequot" and "Nipsic," the government transports "Dudley Buck" and "George C. Collins," and the steamships "America" and "United States."



We would respectfully call the attention of the public to our style of **STEAM ENGINES.** It is now universally conceded that they combine all the elements that advance toward mechanical perfection, viz.: in form—they possess in an eminent degree, great strength, with architectural beauty and proportion of outline; in mechanical arrangement—they are simple, convenient and composed of few parts; in operation—they work smoothly, without jar, vibration or noise, needing scarcely any care or attendance; and in economy of fuel—they have reached a high standard, and there are none made superior to them in this important item. This last result is mainly attributable to our admirable **SELF-ADJUSTING STEAM CUT-OFF** to which we would also invite the notice of the public. In principle and construction it is entirely original, and possesses more advantages than any other in use. It has the merit of being remarkably simple and durable, easily kept in order, and scarcely ever needing repairs. After a thorough practical test of several years, it is generally acknowledged to be the cheapest and best in existance.

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——MANUFACTURERS OF——

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with the aid of their improved machinery, they turn out about 200 dozen daily, and consume annually about 150,000 pounds of 18 per cent. nickel silver, and 25,000 ounces of pure silver. Their works are driven by a steam engine of 50 horse power, Woodruff & Beach's make. The 18 per cent. German silver is taken in the sheets, cut out in a power press, then rolled in a rolling mill that has rolls graded to form the different parts of the spoon to a certain gauge.

The figure is stamped on, in a drop that has hammers of various weights, the largest of which weighs 450 pounds. This weight is raised by steam power and falls about 6 feet perpendicular on to the dies that hold the article to be impressed; it is then trimmed and polished, plated and burnished and packed ready for the market, and sent to all parts of the country, where civilization has secured a foothold.

C. L. Stone & Sons, commenced the manufacture of baby carriages in 1853, at No. 7 Oak street. They now occupy two buildings, one 24x40, three stories; the other, 30x38, two stories, both built of brick. The motive power is furnished by one of Benham's horizontal engines, 25 porse power, with one tubular boiler.

The carriages built by this firm are of a peculiar style of their own, and combine ease, durability and *style*, in such perfection, that their sales have led them to a large increase of their manufactory.

N. P. & W. G. Loomis commenced the manufacture of cigars on State street in 1864. They occupy 3 floors. Employ 10 persons, manufacturing about 30,000 cigars per month.

E. Tucker & Son, 139 Trumbull street, manufacture paper boxes. They occupy 2 stories 50x60. Employ 35 persons. Commenced business in 1849.

Abner Church, 46 Morgan street, manufactures rope of all kinds. His building is 900x24 feet. Employing 5 persons. This business was established in 1790, by James Church, who sold to his son in 1837, who continues the business.

Erwins & Son, manufacturers of silver plated ware of all kinds on State street. The building is 2 stories in height 33x22 feet. They employ 14 persons.

C. H. Adams & Co. commenced business in April 1867. They occupy one floor at 137 State street, for the manufacture of cigars, employing 5 persons and making 7,500 cigars per week.

Hunter & Sanford, 109 Commerce street. Commenced the manufacture of steam engines, lathes and general machinery as successors of the Hartford Tool Company in in 1866. They occupy a 2 story building 40x30 with ell 40 x30, 1 story. Employ 18 persons.

W. L. & N. E. Pitkin, 17 Hicks steeet, manufacture silver and plated spoons, knives, and forks, &c. Occupy a building 30x40 feet, 3 stories. Employing 10 persons. Established in 1858.

The Cheney Brother's Silk Manufacturing Co., employ 1,000 hands in the manufacture of silks and silken goods. The enterprise of this house is proverbial. Some years ago one of its members made a trip to Japan for the purpose of securing the desired quality of raw silk, and the same progressive spirit that prompted this voyage has characterized the entire career of the firm. This company was established at South Manchester, Conn., in 1834. In 1854, a new mill was built at Hartford, which is their main office.

W. C. Marshall & Sons, 31 Wells street, manufacture railway supplies, in 3 story building 75x200, employing 35 persons. The business was established in 1849.

AMERICAN SILKS

MANUFACTURED BY

CHENEY BROTHERS'

SILK

Manufacturing Company

HARTFORD AND SOUTH MANCHESTER,

CONNECTICUT.

—o—

Machine Twist, Sewing Silk, Trams and Organzines;

Fine Organzines for Silk Mixture Cassimeres.

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PONGEE HANDKERCHIEFS,

Silk Warp Poplins, Silk Dress Goods, Belt Ribbons.

SILKS FOR SPECIAL PURPOSES TO ORDER.

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AGENTS:

EDWARD H. ARNOLD & SON, 102 Franklin Street, New York.
CHENEY & MILLIKEN, 4 Otis Street, Boston.
LEONARD BAKER & CO., 210 Chestnut Street, Philadelphia.
CHASE, STEWART & CO., 10 and 12 German Street, Baltimore.

Novelty Weaving & Braiding Works were established in 1848, at 52 Market street. They occupy a 4 story building 100x60 feet, (3 stories of it,) employing 35 persons, and manufacturing worsted, silk, and cotton braids, turning out about 28,000 yards per week.

The house of James H. Ashmead & Sons is the largest gold-beating establishment in New England and the second in magnitude in this country. The reduction of coin gold to the delicate foil and leaf, used by artists, dentists, and decorators, is a process of great interest and delicate toil. The firm employ 14 hands and beat out 70 ounces of gold per week, one Boston house taking the entire product. Mr. Ashmead, in the late association of his sons with himself, has added to his manufactures a general line of dentists' materials. His partners are young men educated at the hammer and crucible. The manufactory is at 41 Trumbull st., and was established in 1839.

E. J. Cusick, brass founder, 16 Trumbull street, employing 3 persons, commenced business in 1866. The building is 40x25 feet, 2 stories.

J. M. Ney & Co., gold foil and leaf manufacturers, 59 Pearl street, occupy 1 room 100x25 feet, employing 10 persons.

A. Roberts & Co., 59 Pearl street, manufacturers of gold and silver eye glasses, employing 9 hands, commencing business in 1845. The room is 24x60 feet.

Plimpton Envelope & Paper Co., 6 and 8 Ford street; employ 75 persons, for the manufacture of envelopes, &c., in a building 100x200 feet. The motive power is furnished by a 10 horse power engine.

Kellogg & Bulkeley, 245 Main street, commenced the lithographic business as successors to E. B. & E. C. Kellogg in 1867. The business being established in 1825. They occupy a building 75x30 feet, 5 stories, the lower floor being rented to other parties. Employ 50 persons, and turn out 400,000 colored prints per year, besides fine work for Insurance companies, &c. They keep 16 presses running, and do a business amounting to $125,000 per year.

J. J. Hubbard, manufacturer of Baker's patent corn brooms, at 142 State street, occupy 4 floors, employing 15 persons and making 75 dozen per week of the patent broom, beside other styles and kinds.

George Lee commenced the manufacture of cigars and tobacco in 1850, occupies a building 100x20 feet, 4 stories; employing 30 persons, and making 20,000 cigars per week. The office and manufactory is at 150 State street.

Pratt, Whitney & Co. commenced the manufacture of machinists' tools and gun machinery, hydraulic engines, &c., at 1 Flower street, in 1860. They occupy the lower floor of a brick building 225x45 feet, 4 stories, built of brick in 1865 by the present company. They have, in addition, a blacksmith shop 100 x 45 feet, an engine house 26 x 45, in which is a 60 horse power engine, built by Woodruff & Beach, with 2 tubular boilers. This company manufacture machinery for nearly all the armories in the United States, and have recently finished a contract for furnishing an armory in Austria. This company is composed of Francis A. Pratt, A. Whitney, Monroe Stannard, Seth W. Bishop, and Roswell F. Blodgett.

W. B. Willard commenced the flouring business in 1854. The mill he now occupies fronts on the river, 100x100 feet, 5 stories, running 8 sets of stones and employing 30 persons. The capacity of the mill is 350 barrels per day, and 1000 bags of meal. The power is furnished by a 150 horse power engine, built by Woodruff & Beach, with two return flue boilers.

Hunt, Holbrook & Barber, 130 and 132 Asylum street, commenced the manufacture of fine calf boots in 1852. They now occupy a 4 story building 44x100 feet, employing 200 persons, 100 of which are in Weathersfield Prison; making about 6,000 cases per year; using about 8,000 sides of sole leather and 1,800 dozen of calf skins per year. The power is furnished by two 5 horse power engines, built by Chubbuck & Sons, of Roxbury, Mass. The business of this concern was established by Hunt & Holbrook, and continued by the present firm.

N. Palmer & Co., commenced the manufacture of leather belting in 1860. They occupy 3 floors in brick building, 132 Asylum street, 20x100 feet. Employ 8 persons, and do a business in leather belting amounting to $45,000 per year.

The Weed Sewing Machine was first manufactured at Nashua, New Hampshire, in 1856, and was moved to Hartford in 1863, at which place the company was incorporated with a capital of $500,000, under the name of The Weed Sewing Machine Company. H. Blanchard, President, S. L. Clark, Secretary. This company have branch offices all over the United States; the home office being at 239 Main street. Their manufactory is on Flower street in the western part of the city, occupying 3 floors, 225x45 feet; employing 250 persons; manufacturing 1,700 per month. They have made 25,000 of these machines since 1863. Office in New York, 613 Broadway, in Boston 349 Washington street.

William Boardman & Sons, 205 State street, commenced the manufacture of coffees and spices in 1841. They now occupy a 4 story brick building, 30x60 feet. Employ 7 persons, use a 15 horse power engine, made by Woodruff & Beach, and one cylinder return flue boiler.

Beach & Company, commenced business in 1835. They now employ a room at the Grove Works, on Potter street, 80x100, for the manufacture of dye woods and extract of Indigo, of which they make about 4 tons per day. Their office is at 209 and 211 State street, and employ 7 persons.

The Hartford Thread Company commenced the manufacture of thread, January, 1867, in a room 75x35 feet, 4th floor of brick building rear 262 Main street. They employ 7 persons, turning out 5,000 dozen of spool cotton per month.

Kibbe & Co., commenced the manufacture of confectionery in 1860, at 7 American Row. They employ 2 persons, turning out 1200 pounds per week.

W. H. & L. H. Robertson, commenced the manufacture of packing boxes in 1858. They occupy a room 60x60 ft. Employ 7 persons, using 800,000 feet of lumber per year. The works are situated at the Grove Works, Potter street.

C. W. Emerson, rear 262 Main street, manufacturer of patent improved expansion lamp and gas shades. This invention was patented by Mr. E. Oct. 7th, 1865, with improvements added since by him and his former partner, V. Dunlap, which were also patented. The business was first conducted by Dunlap & Emerson, who commenced in June, 1866, and continued till Jan., 1867, when Mr. E. continued. He occupies a room 70x35, in the 4th story of a brick building; employing 6 persons, and turning out 700 gross per year.

Dwight Cushman, manufacturer of patent turbine water wheels, No. 21 Potter street, commenced business in 1860, and now employs 20 persons in two rooms, 50x30 each, with a blacksmith's shop 30x30. His machinery consists of 7 lathes, 1 planer, 1 upright drill, &c.

Hunt Bros. commenced business in 1867, as successors to Fitch & Hunt, who commenced in 1864. They occupy one room, 60x55, at 21 Potter street; employing 10 persons,

cutting up 12,000 feet of lumber per month; manufacturing all kinds of packing boxes.

H. A. Converse & Co., commenced the manufacture of castings for machinery in 1865. They occupy 3 buildings, the main one used as a foundry, 60x80 feet, 1 story, another 30x40 feet, 2 stories, for a wood and boiler shop, the last 2 stories, 30x40 feet, for a store house. They employ 20 persons, turning out 2,500 lbs. of castings per day. The foundry is located at 120 Grove street.

E. R. Fitch, 241 State street, commenced the manufacture of boxes for packing, at this place in a building 30x50 feet. Employs 4 persons, using 400,000 feet of lumber per year.

Colt's Willow Ware Manufacturing Co., was organized in 1861 with a capital of $25,000. They occupy a 3 story building for the manufacture of willow ware of every kind; employing 60 persons. The power is furnished by an 8 horse power engine with 1 cylinder boiler. The works are situated on Wawarme avenue; use up 100 tons of willow per year, which is grown by the company who have 75 acres in cultivation. R. W. H. Jarvis is President of the company.

Louis Mansay & Son, 17 and 21 Elm street. This business was commenced by the father, in 1841, who is now deceased. The son continues under the same name. Employs 52 persons, manufacturing all kinds of carriages in a 5 story building 80x90 feet.

S. N. Harts & Landy, 39, 41 and 43 Albany avenue, commenced business January, 1868, for the manufacture of all kinds of carriages, in a building 136 x 65 feet, 3 stories high, giving employment to 30 persons. S. N. Harts commenced the manufacture of carriages in 1833, on Fort street.

The Hartford Eyelet Co. occupy a room 24 x 61, on State street; employ 10 persons, turning out 3,000,000 of eyelets daily. The company was incorporated in 1866, with a capital of $100,000.

A. Prall, Agent, commenced the manufacture of ornamental wood work and ornamental church furniture, in 1866, at 22 and 24 Mulberry street. The building is 30 x 50 feet, 4 stories; employs 10 persons, and does a business amounting to $25,000 per year.

Coburn Soap and Washing Fluid Manufacturing Co. incorporated in 1865; occupy a three story building 110x60 feet, situated near Colt's Fire Arms Works. This company manufacture laundry and toilet soaps, producing daily about 4,000 lbs. laundry, and 2,000 lbs. toilet soap, doing a business of $150,000. This product represents 40 varieties of soap, and 275,000 paper boxes are used annually for packing. The factory is a building 80x50 feet, and three stories, which contains two immense kettles with a capacity of 2,000 lbs. of grease each.

E. Crosby & Son occupy a five story building, 100x34 feet, situated in East Glastenbury, Conn., where they employ 50 hands, manufacturing satinets; consume about 160,000 lbs. stock per year, producing 240,000 yards. Their machinery is furnished with power from a forty horse breast wheel, 18x11½ feet, under 14 feet head. Messrs. C. & Son have also a flock and shoddy mill, capable of producing 1,500 lbs. daily. They have invented a flock machine, feeding the rags on an apron without any preparation. Rights for sale. Office, No. 111 State street, this city.

Case, Lockwood & Brainard. Fifty years ago, and for many years subsequent to that, Hartford had quite a widespread fame for her publishing business. Silas Andrus first, and afterwards Silas Andrus & Son, sent the name of their firm abroad on many thousand copies of school books, while D. F. Robinson & Co. perpetuated theirs in scores of general publications. Later, Henry S. Parsons and Belknap & Hamersly published large numbers of books and pamphlets, and those who have in their libraries the local publications of 30 years ago, will find these names at the foot of the title pages of many of them. Then, for a time, the business lost its relative importance, but latterly it has been revived, and since 1863, it has assumed large proportions.

The oldest of the firms now prominent, and one of the two which connect the present with the former period of publishing prosperity, is that of which Mr. Newton Case is at the head. The firm was organized in 1836, under the name of Case, Tiffany & Co. Subsequently it was called, for three years, Case, Tiffany & Burnham; then again, Case, Tiffany & Co., and finally, on the retirement of Mr. Tiffany and the accession of Messrs. James Lockwood and Leverett Brainard, it took the title of Case, Lockwood & Co. These publishers have for 30 years occupied quarters on or near the corner of Pearl and Trumbull streets. In 1838, they rented the old county jail, on the corner, which, in 1848, they purchased. A little more than 2 years ago they moved to a building west of this, and now, having demolished the old jail and erected a large building on its site, they have returned to the corner.

The new building is a substantial brick structure 135 feet by 40, and five stories high, with a projection on the south side for stairways and elevator. It cost about $60,000. The basement is divided into two rooms, one of which, under the office, is used as a stock room. The other is a machine room and carpenter's shop, with some room for storage, a place for wetting down paper, and a large paper press. Extending out under the sidewalks are large vaults for the storage of plates. The basement has a light through pavement glass, and is heated, as are the other parts of the building by steam. The corner room on the first story is 26 x30 feet, and has been elegantly and tastefully fitted up as an office. Around the sides runs a wide baseboard of black walnut. Above this is a wainscotting of alternate stripes of chestnut and red oak, the latter having been taken from the timbers and planking of the old jail. Above the wainscotting the sides are of chestnut, relieved by black walnut. At the edge of the ceiling is heavy black walnut moulding, and the ceiling itself is a deep panel work of pine, highly finished, with black walnut mouldings. Around the windows and doors are large strips of black walnut rope moulding fastened with silver headed screws, and giving a very ornamental effect. The desks are of chestnut and red oak, with black walnut tops and rails. The outside windows have large panes of clear glass, and windows between the office and the press room are furnished with ground and figured glass. Back of the main office, on the Pearl street side, is a private office 12x16 feet, similarly finished. The remainder of this story is used as a press room, where twelve Adams power presses, from the medium to the largest size, are kept almost constantly running on book work.

In the second story, at the east end, is a room for proof readers. Along the Pearl street side are stands for forty compositors, all having an excellent light from north windows. On the other side of the room are 8 Hoe cylinder presses for job work, and one hand and card press. The whole of the third story is in one room, most of which is used as a bindery, a portion of the east end only being used for the manufacture of job and blank books. In this room are two large ruling and one paging machine, twelve large standing presses, two patent book cutters, one backing machine, three embossing presses, and the apparatus for marbling books. In a small projection over the arched entrance way, on the Trumbull street side, is the gilding room. The fourth story contains the folding and sewing room, in which are sewing, cutting, stabbing and smashing machines, and the fifth is used as a drying and storage room for the

printed sheets and unbound books. On this floor also are two hydraulic presses, one of 600 tons pressure, and the other of over 400 tons.

The firm employ in this building about 200 hands, and besides publishing on its own account, it manufactures a great many books for other publishers, and does and immense amount of job printing and binding. During, and since the war, it has printed many general and local histories of the conflict. The largest work of this kind, that it has executed is Greeley's "American Conflict," published by O. D. Case & Co. Of the first volume of this, a book which sells at $5 per volume retail, were printed 150,000 copies, and the sale of the second volume was very large. Of "Anecdotes and Incidents of the Rebellion," another $5 work, this firm furnished 30,000 copies for the Hartford Publishing Company; of Brown's "Four Years in Secessia," 40,000 copies, for O. D. Case & Co.; and of Holland's "Life of Lincoln," 10,000 copies, for Gurdon Bill & Co., of Springfield. Of smaller works, Case, Lockwood & Co. have themselves published several, including a "Life of Gen. Lyon," the "History of the 117th Regiment New York State Volunteers," and a "History of the 13th Regiment Connecticut Volunteers."

They publish about 10,000 copies yearly of a large "Domestic Bible," which sells at $9 a copy, and which has been several years in the market. They also print a great many copies of the "Cottage Bible," illustrated, in two volumes. They also print about 150,000 copies yearly, of various school books. Of books of local interest, the "Ecclesiastical History of New Britain," by Deacon Alfred Andrews, and the "Poetry of Bishop Burgess," the latter for Brown & Gross. They have also published "The Cottage Cyclopedia of History and Biography," a book of about 1,000 pages, for general use. This is a very complete reference book on ancient and modern history and biography. The great amount of valuable information in the book is well arranged, and the book itself is neatly printed and firmly bound, which made it reach a large sale.

Taking into account the foregoing figures, and recollecting that this firm, though the largest, is only one of seven publishing firms in the city, it will be seen that the business has become one of great importance.

HAWLEYVILLE, a country station of about 6 houses, situated 87 miles from Pittsfield, and 23 from Bridgeport, in the town of Newtown, on the Housatonic Railroad.

HITCHCOCK'S, 19 miles from New Haven, and 57 from Northampton. Flag station on the Canal Railroad; 8 houses near depot.

William J. C. Clark & Co., commenced business in 1850, for the manufacture of Clark's Patent Carriage Bolts, machine bolts, coach screws, nuts, &c., &c., occupying 5 buildings, situated about five minutes walk from the depot. The dimensions of their buildings are as follows: 75x24 ft. 2 stories; 20x30 feet, 1 story; 60x24 feet, 1 story; 144x 35 feet, 1½ stories, and office 24x30 feet; besides they have 3 or 4 small out-buildings. Employ from 50 to 60 hands. Consume about 15 tons refined iron weekly.

Their motive power is furnished from a 35 horse turbine wheel, and 15 horse engine.

HOADLEY'S, 30¼ miles from Hartford and 2½ from Waterbury. A country station on the Providence, Hartford & Fishkill Railroad.

HOP RIVER, 63¾ miles from Providence, 26¼ from Hartford, on the Providence, Hartford & Fishkill Railroad. A country station. The only manufactory here is—

The Hop River Warp Co., which was incorporated in 1865, with a capital of $21,000. Wm. C. Jillson, Agent and Treasurer. The factory is about one-eighth mile from the depot, on the Hop river, having a fall here of 16 feet. The mill is 60x30 ft., 4 stories in the rear, 3 in front. They employ 25 persons, consume 30 bales of cotton per month, and produce 10,000 pounds of white warps. An overshot wheel supplies the power.

HOSKINS. A flag station between Granby and Simsbury; about 12 houses near depot on the Canal Railroad.

HYES, 7½ miles from New Haven. A country station on the Canal Railroad.

HEWETT CITY, 9½ miles from Norwich and 50½ from Worcester, on the Norwich and Worcester Railroad. A village containing 3 churches, 1 bank, a few stores, and 2 large cotton mills, the information for which we could not obtain. There is a flag station on the Providence, Hartford and Fishkill Railroad, one mile from the village, which is also called Jewett City. This station is 42½ miles from Providence and 47½ from Hartford.

KENT, 62 miles from Pittsfield and 48 from Bridgeport. A village and town on the Housatonic river, containing 2 churches, and an estimated population of 800. This town was first settled in 1738. This is a mountainous township, with some fine land on the banks of the Housatonic, which passes through its western border. The Housatonic, calm and still, winding gracefully at the foot of a high and rugged mountain, renders the scenery from the neat and quiet village of Kent, highly picturesque and beautiful.

KENT. A country station on the Danbury and Norwalk Railroad, about 5 miles from Norwalk.

LANESVILLE. Flag station on the Housatonic Railroad, 2½ miles below New Millford. Has about 200 inhabitants.

LEBANON, 23 miles from New London and 10 from Norwich. A station and town in New London County, on the New London and Northern Railroad, settled about 1700. The surface of the town is uneven, the soil is of a chocolate color, a rich deep mould, very fertile and well adapted to grass. The village is on a street more than a mile in length, wide and pleasant. It was the residence of the Trumbull family, celebrated for their genius and patriotism. Their family tomb contains the ashes of 2 governors, one commissary general and a signer of the Declaration of Independence. The richness

of the land and the general advantages this town has for agricultural pursuits, have attracted many families from the southern part of Rhode Island, who have settled here for the past ten years.

LITCHFIELD, 17 miles from Waterbury, and 49 from Bridgeport. A station and town on the Naugatuck Railroad. The village is located 4 miles west of the depot, and is the county seat of Litchfield County, having a court house, jail, &c., and a population of about 1,000. The Indian name of this town is Bantam. The land is elevated, the surface of which presents a diversity of hills and valley. The soil is a gravelly loam, deep, strong and admirably adapted to grazing. The largest pond in the State, called Great Pond, having an area of 900 acres, is located here.

Litchfield village is a delightful place, situated on an elevated plain surrounded by interesting scenery and affords extensive prospects. The streets are wide and well shaded, and the residences are elegantly and tastefully built. This is the home and birth place of several noted men of long ago. Oliver Wolcott, one of the signers of the Declaration of Independence, resided here; also, his son, Oliver Wolcott, Jr. who held the office of first Auditor of the Treasury, then Secretary of the Treasury, then Governor of Connecticut, and was the last survivor of Washington's Administration. Benjamin Tallmage, a Colonel in the Continental Army, was also a resident of this town, also Brigadier General Ethan Allen.

PAGE & KEENEY, commenced business in 1865; manufacturing of paper of all kinds, except note paper. It is a 2 engine mill of 300 lbs. each, and run by 2 turbine wheels of 25 and 10 horse power; building 45x35 feet, 3 stories; machine building 60x30 feet; employ 9 hands; consuming 1,400 lbs. rags, and making 1,000 reams of paper per day. At present they are manufacturing a superior article for water closets. Mill directly opposite the depot.

LOVETTS, 45¾ miles from Providence and 44¼ from Hartford. A flag station on the Providence, Hartford and Fishkill Railroad.

LOCATED here is the KING WOOLEN COMPANY. Amos King, Wm. A. Buckingham, Edward Chappel, James S. Carew, Bowers and Beeckman, I. M. Buckingham, proprietors. They commenced the manufacture of fancy cassimeres in 1865. A freshet Feb. 10th, 1867, swept away the entire mill, which was immediately rebuilt. It is a substantially built mill, stone, 146x52, 5 stories, picker house 40 x70, 2 stories, boiler and dye house 90x30, 2 stories, office and store house 40x40, 1 story. They employ 123 persons. Run 12 set of woolen machinery. Consume 1,500 pounds of wool per day and produce 30,000 yards per month. The establishment is about ½ mile from the depot on the Little river. Amos King, Agent, George C. McLeon, Superintendent, Bowers & Beeckman, Agents, 64 Leonard street, New York. The Post Office address of this company is Lisbon, Conn.

WEQUONOCK MILLS CO. was incorporated 1868. Lucius W. Carroll, President; L. A. Gallup, Secretary and Treasurer. The mill is on the Shetucket river three-quarters of a mile from the depot. The main building is 100 x 40 feet, 3 stories and wing 50x38 feet, 3 stories, built of stone. The capacity of the mill is 8 sets of woolen machinery. At present they run 10 broad (Crompton) looms; employ 34 persons, the fall being 14 feet. A 36 inch Cushman wheel supplies the power. They consume 3,600 pounds of wool per week, and produce 4,000 yards of fancy cassimeres.

HOOPER MANUFACTURING CO. This mill was built in 1866. It is 186x50 feet, 4 stories, with wing 50 x 150 feet, built of stone. They run 5 sets of woolen machinery, with a capacity for 8; 22 broad looms, Crompton, Stafford & Pequot, makers; consume 1,000 pounds of wool per day, and produce 4,000 yards of fancy cassimeres per week. A Swaine 3 feet wheel supplies the power. The mill is on the Shetucket river, with a fall of 13½ feet.

THE OBENDAUER PAPER CO. occupy a building about three-fourths of a mile from this depot, for the manufacture of manilla paper. They employ 7 persons and produce 1,500 lbs. per day. They run 2 engines and 1 cylinder machine. Two 36 and 18 inch Cushman wheels furnish the power, the fall being 20 feet; located on Little river.

THE REED PAPER CO. was incorporated in 1867. They occupy a mill one-quarter mile from the station, for the manufacture of print and book paper. They employ 12 persons, use 2 engines and 1 cylinder machine, and produce 1,700 pounds per day of 24 hours; 2 Waite's turbine wheels furnish the power. Located on Little river.

LYME, 33 miles from New Haven, 17 from New London, 109 from New York and 123 from Boston, on the Shore Line, and the east bank of the Connecticut. Judge Charles J. McCurdy, late minister to Austria, resides here; and this was also the former residence of Roger Griswold, an early governor of Connecticut, and the ancestor of two governors and of a numerous and highly respected family. Passengers and freight are now conveyed across the river here by a ferry boat. A draw bridge is now in process of erection.

MADISON, 19¾ miles from New Haven, 30½ from New London, 96 from New York and 136 from Boston, on the Shore Line. A station and town by the same name. The town was taken from Guilford in 1826. It borders on Long Island Sound, and embraces Hammonasset Point. The town has a small harbor and some navigation. The Hon. Thomas Chittenden, for many years Governor of Vermont, and his brother Ebenezer Chittenden, a gentleman of great mechanical genius, were natives of this town.

MANCHESTER, 81¼ miles from Providence and 8¾ from Hartford; a manufacturing village on the Providence, Hartford and Fishkill Railroad. The Hockanum flows through this town. The first cotton mill in the State was built here in 1794. A branch road was built to South Manchester from this station, two and half miles, and trains commenced running in the spring of 1869.

The UNION MANUFACTURING Co., was incorporated in 1819, with a capital of $200,000, E. B. Watkinson, President; G. M. Bartholomew, Treasurer; John S. Gray, Secretary. The buildings are 4 in number, built of stone and brick with several small buildings adjoining. They run 9,000 spindles, 270 looms; consume 700 bales of cotton and produce 2,000,000 yarns of ¾ ginghams per year. Employing 300 persons. The mills are ¼ mile from the depot, on the Hockanum river, with a fall of 22 feet. The office of the company is at 55 Asylum street, Hartford. A. M. Stone, Superintendent at the mills.

KEENEY & WOOD MANUFACTURING Co. was incorporated Dec. 28th, 1859, with a capital of $50,000. Sanford Buckland, President, Timothy Keeney, Secretary and Treasurer.

They occupy a building 40x100, 2 stories, with wing 100x 30, 2 and 1 story. This company run 2 common and 1 patent engine, with a capacity of 1000 pounds and 1 Fourdrinier machine. They employ 25 persons, and produce 2,500 pounds of book paper per day. A 12x21 breast wheel supplies the power, the fall being 11 feet, located on the Hockanum river ¼ mile from depot. Campbell, Hall & Co., 10 and 12 Nassau street, New York, Agents,

KEENEY BROTHERS. Business established in 1862. Occupy two 2 story buildings, 154x36, and 86x24 feet respectively, with bleach, coloring and machine shop attached. They manufacture hosiery, shirts and drawers, using Otis's knitting machines; employ 60 persons, and produce 25 dozen per day. Their motive power is furnished by steam.

PITKIN MANUFACTURING CO. Business established in 1865. A. B. Pitkin, Treasurer. Occupy a building 32x80 feet; employ about 50 hands. Manufacture white colored, double and twist yarns and dressed warps; and consume about 400 lbs. of stock daily.

AT SOUTH MANCHESTER, near the above station, are

THE ATLANTIC, BALTIC AND ADRIATIC MILLS, which are owned and run by Mr. Henry E. Rogers. Established 1844, 1863 and 1867. The dimensions of the buildings are 50x120, 40x100 and 48x94 feet respectively. He employs 35 hands. Manufactures candle card, album board, hardware and manilla paper, and does a business of $80,000 per annum.

THE GLOBE MILL CO. commenced the manufacture of satinets in 1844. They occupy a 3 story building 30x75 feet. Employ 18 hands and produce $150 worth of the above goods daily.

CHENEY BROTHERS, see Hartford, pages 496 and 497.

AT NORTH MANCHESTER is the

HUDSON MANUFACTORY OF FINE PAPERS, established 1780. This firm occupy two buildings 300x10 and 200x40 feet respectively, for the manufacture of bank note, bond, and parchment paper, parchment envelopes and paper for foreign correspondence, besides every other style of paper, all of the finest quality. They manufacture water-marked paper in great variety of designs, of which they make a specialty. Run 10 engines, 2 Fourdrinier machines, besides all other necessary machines appertaining to their business. The amount of paper produced daily, will sum up, if not exceed 50,000 sheets. The mills have been running day and night for the past seven years upon government work, and upon work for New York Bank Note Company and banks of foreign countries.

MANSFIELD, 38½ miles from New London and 61½ from Grouts Corner, (now Miller's Falls.) A town and station on N. London Northern Railroad, in Windham Co. The Indian name for this town is Naubesetuck. It was taken from Windham in 1703. The surface of the town is uneven, and some of the hills have considerable elevation. Watered by the Willimantic and Natchang and its tributaries, Mount Hope and Fenton.

MECHANICSVILLE, 24½ miles from Worcester and 35½ from Norwich. A flag station on the Norwich and Worcester Railroad.

MECHANICSVILLE COMPANY, Sabin Sayles, Harris C. Sayles, Thomas D. Sayles and Warren D. Harris, proprietors. This company was established several years ago, and contained the same partners except T. D. Sayles who was admitted in 1864, at which time a new brick mill was built, 200x 44, 4 stories with wing 44x44, 3 stories and an extension 80 x44, 2 stories, used for a boiler house, &c. &c. The mill is a fair sample of the elegant mills that have been built throughout New England, having fire escapes, and every convenience for conducting a liberal establishment, and securing to the employees and employer alike, a manufactory that is conducive to their comfort and happiness. The mill has 12 set of woolen machinery, 40 broad (Crompton,) looms. Employing 225 persons; consuming 737 pounds of wool per year, and producing 636,000 yards of fancy cassimeres. Two Tyler 5 feet wheels, furnish the power, the fall is 15 feet, located on the French river.

MERIDEN, 18 miles from Hartford, 18 from New Haven and 92 miles from New York, on the N. Haven, Hartford & Springfield Railroad, is a rapidly growing manufacturing city, containing about 12,000 inhabitants, situated in one of the most beautiful, romantic and healthful regions in the Connecticut Valley. No place on the line from Boston to New York, has sprung into notice so quickly as this city. Many improvements have lately been made here: grading of streets, erection of public buildings, churches, &c., among which is the High School and Byxbee House, the latter of which was lately destroyed by fire, and immediately rebuilt. Both prove attractive and ornamental additions to the general appearance of the place. Meriden in a measure owes much of her prosperity to the capitalists of her neighboring city, Middletown, situated 10 miles distance east across the country. With this assistance coupled with muscle and brains, Meriden has become independent, and is the home of some of the wealthiest and enterprising men of the State. A daily and two weekly papers are published here; three banks and ten churches.

The city has two post offices, one on the hill about one mile from the depot, called Meriden, and the other near the depot and the centre of trade, West Meriden. Persons having business with this city will find it to their advantage to direct their letters to the latter place, by so doing, much time and trouble will be saved. The city are about having water works to supply the citizens with pure water, thus enhancing the value of property and the comfort of the public generally.

The heaviest tax payer in Meriden is Charles Parker, whose tax is $161,496. Next in rank comes Horace C. Wilcox, $66,525 and Edward Miller, $57,740. Some of the heavy corporations are the Meriden Britannia Company, $415,000; the Meriden Cutlery Company, $255,400; J. Wilcox & Co., $231,025; Wilcox Silver Plate Company, $175,000; Edward Miller & Co., $146,000.

MERIDEN BRITANNIA CO. Warehouse at 199 Broadway, New York. H. C. Wilcox, President; D. C. Wilcox, Secretary; George R. Curtis, Treasurer; I. C. Lewis, Superintendent. Having heard much of the great capacities and completeness of this factory, and been long cognizant of the high merits of its wares, which for years have ornamented the show windows of the leading houses of New York and other cities throughout the Union, and which have become so extensively used in hotels, on board steamboats and other vessels, and in private residences, we felt curious to pay a visit to the establishment and learn if the reports of its extent and perfection of equipment were exaggerated, or warranted by the facts.

The Meriden Britannia Company was established in the year 1852, the factory at that time being near the site of the substantial buildings which compose the present extensive series of factories. The warehouse in New York has been at 199 Broadway ever since 1860.

The factory embraces several buildings, the chief one being the most imposing structure in that city, and is 527x40

feet. The whole number of buildings is about half a dozen. They are principally of brick, built especially for the varied purposes of the business, are nearly all four stories in height, and occupy four acres of ground, in the heart of the city. The depot of the New Haven, Hartford and Springfield Railroad is located directly opposite this establishment, which is thus provided with unusually convenient facilities for the transportation of its numerous descriptions of elegant and serviceable merchandize, either by rail to the north and east, or direct to New York, or by steamboat to New York from New Haven, from which West Meriden is distant but 18 miles and 10 miles west of Middletown on the Connecticut river.

In the busier seasons are employed in all the various departments, from nine hundred to eleven hundred experienced operatives of both sexes, and large as has been our own experience as a chronicler of the business of prominent factories in New England and elsewhere, we can truly say that never have we been an eye witness of busier scenes than we observed in this vast hive of mechanical industry, nor one more admirably organized or more thoroughly appointed in all the details of the various sections we passed through.

The value of the merchandise usually on hand at one time at the factory and warehouse is about $1,000,000, and this estimate is independent of the immense amount of costly machinery, tools, etc., employed in the manufactory. The annual sales of the company average $2,500,000, and the goods are now sent to the trade, not only throughout the United States, but largely to the British Provinces, West Indies, South America, Mexico Pacific Coast, and even to England, France, parts of Africa, to Australia and to China.

The specialties or leading lines of these goods are nickel silver, and fine white metal electro plated wares. All these are enumerated and elaborately illustrated in the price list and appendix issued by the house, one edition of which inclusive of the numerous splendid engravings, cost them nearly $40,000. This item alone is significant of the liberality and enterprise of the company. Another fact worthy of note is that they manufacture more pieces of nickel silver and table ware than all other similar establishments in the world combined, outside of Connecticut. From the mass of interesting information which we gathered while there we will subjoin the following additional items, viz.: The Meridan Britannia Company manufacture of nickel silver, 20,000 pounds per month; of white metal goods, from 40,000 to 50,000 pounds per month; and during the last twelve months they have used in electro plating of pure silver, over $200,000 worth; all of which facts are easily susceptible of proof.

On our tour through the establishment, which by the way comprises one mile of flooring, forty feet in width, we were particularly struck with the huge size of much of the machinery; for instance, the rollers, which are the largest used in this kind of business in the United States—one press for raising and imparting the ornamental figures to the wares, weighing 26,000 pounds, and having a stamping or pressing power of perhaps 40 tons. One colossal Corliss steam engine which we saw has a capacity of 150 horse power, the nominal power being somewhat less, and one steam engine made by the Pacific Iron Works is of 125 horse power. These monster engines are stationed in the principal factory, while other large ones of less dimensions are in constant use in the adjoining buildings.

(An interesting trial of the respective merits of the Corliss engine, made by Wm. A. Harris, Esq., of Providence, R. I., and the Lowe engine, made by the Pacific Iron Works, of Bridgeport, Conn., took place at this establishment in the month of September, 1868, which trial we give entire at the bottom of this page.)*

The amount of coal used is about 1,500 tons per year. The establishment is supplied with an abundance of both steam and water power. The most important part of the machinery used was made expressly for the company and patented by them; and one additional evidence of the excellence of the manufactures is found in the fact, that the older members of the concern have had constant practical experience in the business of between thirty and forty years.

For the eighteen years during which the Meriden Britannia Company has been in existence, as manufacturers of electro plated goods, their productions have been subjected to the most thorough test, by extensive use in hotels, steamships, saloons and private households, for years, and by their durability as well as by their superior beauty, have afforded unqualified satisfaction and elicited the highest approval. They cost but one-fifth as much as pure silver, while they possess all its elegance of appearance, and render equal length of service. The demand for these manufactures has steadily augmented from year to year since 1852, and the enterprise and taste of the company have received such en-

* We quote from the *Meriden Republican*, an interesting trial of a Corliss engine, built by William A. Harris of Providence, and an engine built by the Pacific Iron Works, of Bridgeport, Ct.:

"William A. Harris, of Providence, has recently completed and put into the works of the Meriden Britannia Company, West Meriden, Ct., a Corliss engine of 125 horse power. This engine is attached to the same shaft as an engine built by Pacific Iron Works, Bridgeport, Ct., but of the ordinary construction, and which has been in use four years. This was put in complete order, and the two engines, side by side, taking steam from the same boilers, and applying their power to the same shaft, were tested alternately recently.

"Mr. Lowe, of the Pacific Works, was present a portion of the time, and made a personal trial of both engines. He began what may be termed an informal trial with his own engine, commencing on the morning of the 24th of August. At the expiration of Saturday, the 29th, his engine had expended 39,990 lbs. of coal, and rolled 1,248 8 by 12 inch plates of 9-16 inch thickness, down to the thickness required for the manufacture of Britannia goods. The next week, commencing on Monday, the 31st, he made a trial of the Harris new engine. On the day ending September 5, the new engine, that is the Harris engine, had rolled 1,375 plates, and burnt 25,810 lbs. of coal. The new engine, it will be seen, had, therefore, consumed 14,180 lbs. of coal less than the Lowe engine, and yet had turned out 127 plates more than it had, although during the running of the Harris engine, the rolls were not in use for seven hours.

"The informal trial was pretty conclusive, and clearly demonstrated the superiority of the Corliss engine. Before Mr. Harris commenced *his* trial, he had one boiler that supplied steam for other purposes than motive power detached, so that the steam generated by said boiler was not used in connection with the engines. The fuel under the three remaining boilers was carefully weighed and accounted for. With Mr. Lowe's informal trial, this boiler was not detached, which accounts for the excess in figures of the two previous weeks.

"On the 7th, Mr. Harris began *his* trial of the two engines. He commenced with his own engine, and at the end of the week had consumed 18,875 lbs. of coal, and had rolled 1,532 plates. During four days of last week, Lowe's engine had consumed 21,635 lbs. of coal and had rolled 700 plates. The average consumption of coal per day upon the Harris engine is 3,146 lbs.; the average on the Lowe machine being 5,409 lbs., a saving by the former of 2,263 lbs., or 41.8 per cent.

"On the last three days of the trial Mr. Harris run his engine with two boilers only, instead of three. An attempt was made to run Lowe's engine with two boilers, but after working an hour and three-quarters, the engineer was compelled to attach the third boiler. The speed of the new engine is fifty-five revolutions per minute, and at one time, Friday, the 11th inst., an indicator diagram was taken, showing an increase of the load in four revolutions of 50 37-100 horse power, without affecting the speed. On this day there were 330 plates turned out, being the largest number ever rolled at these works.

"From the facts and figures above quoted, the superiority of the Harris engine can be seen at a glance. The first great advantage is the vast saving of fuel, and the increased amount of work it turns out."

EDWARD MILLER & COMPANY,

MERIDEN, CONN., STORE 249 PEARL STREET, NEW YORK.

Manufacturers of SHEET, ROLLED and PLATERS

Brass, Copper, German Silver,

PLATED & BRITANNIA METALS

Rolled to numbers and widths, adapted to the wants of the trade. Also, manufacturers of a great variety of Coal Oil Burners, and Lamp Trimmings, including Lamp Collars, Reducing Collars. Globe and Shade Holders, Shade Clasps, Connecting Brasses, Harps, Chain Hangers, Prison Holders, Sockets, Iron Bolts, Borders, Marine Lamps, Brass Hand Lamps, Bronzed Tin Side Lamps, and Backs, Iron Harps, Plated and Fire Reflectors, Lanterns, Lantern Trimmings, Oil Screws and Hoops, Fluid Lamp Tops, Brass Cash Box Handles, Patent Can Tops, Bent Spouts for Kettles and Cans, Beach Patent Can Spout, Patent Tea and Coffee Spouts, Cake Cutters, Candle Stick Springs, Zinc, Tin and Brass Machine Oilers, Oiler Screws and Spouts, Seymour's Patent Seamless Oiler Spout and Screw, Tinned Malleable Sauce Pan Handles, Tinned and Black Kettle Ears, Straight and Tapering Brass Tubes of any required length or thickness.

Also, prepared to execute job work in Sheet, or Cast Brass, Zinc, German Silver, or Britannia Metal. Machinery, Tools, and Dies, made to order; and new styles of Goods furnished to the Lamp and Hardware trade.

couraging patronage that they make unceasing efforts to introduce novel and symmetrical patterns in rapid succession, employing the best materials, the most tasteful designers, the most skilled and faithful artisans.

Our passage through some of the forty rooms comprised in the main factory, seemed almost like a pilgrimage through fairy land, or a realization of those scenes of glittering riches described in the tales of the Arabian Nights, so vast and numerous and dazzling were the heaps of shining vases, goblets, pitchers, trays, baskets, etc., which gleamed around us on every hand, rich in the attractions of fantastic shapes and exquisitely elaborate ornamentation.

In the departments devoted to the numerous processes of manufacturing white metal goods, our attention was called to its exceeding fineness and hardness. In this branch, also, the progress made in decorating the work by engraving, chasing, etc., is marked by continual improvement and the introduction of numberless new and charming designs and patterns. Twice a year the company issues an elegantly illustrated appendix to their price list, for the use of the trade, that they may be aided in their selections of the novelties thus constantly being introduced.

We have alluded to the delights we experienced in surveying the elegant varieties of finished wares in many of the rooms in the main factory. Of course, a large proportion of these wares are articles of luxury and household adornment, but let not the reader imagine they are articles for the gratification of the eye and a refined taste only; and as we have also referred to the valuable improvements patented and introduced by the company, we will illustrate the fact by reference to a few which merit the prompt attention of the trade. Among these are the electro plated spoons and forks, patented by the company, and comprising table and dessert spoons and forks and tea spoons.

The main factory which was built for and under the immediate supervision of the Meriden Britannia Company, and expressly adapted to the varied requirements of their business, is by far the largest and noblest looking edifice in the city. Its dimensions we have already given. We do not purpose to describe the complicated details which mark each stage of the manufactures there produced. Such a task would require too much space in this book.

We will, however, enumerate the principal departments in the building; these consisting, on the first floor, of the spacious and elegantly fitted-up offices of the company, the packing and shipping departments, the boiler and engine rooms, the machine room, the Superintendent's office, and the divisions in which are performed the processes of buffing and spinning nickel hollow ware, brazing, stamping, mixing, casting, etc. The second floor comprises the vast nickel silver cutlery department. The third floor is mainly devoted to spinning and soldering the wares. The fourth floor consists of the finishing department for most wares; and the fifth or attic floor is used wholly for storage purposes.

A special peculiarity of the company is that they begin, continue and complete the manufacture of every article, from the time the rough metal is received at the factory, till the final finishing process, which renders it ready for market.

The safeguards against conflagration are ample, we had almost said complete. A large number of the operatives are organized into a very efficient fire department, and at one time they not only saved this establishment but the property of the neighbors from destruction. Iron doors and solid brick partitions aid in resisting the spread of flames in the contingency of fire, and by means of a force pump, four streams of water at one time can be thrown, 175 feet each, through three-inch hose pipe, and 1¼ inch nozzles.

For the convenience of the trade we furnish the following

THE MERIDEN MALLEABLE IRON COMPANY,

West Meriden, Connecticut.

Manufacturers of

House Furnishing Hardware,

And keeping always on hand a Large Stock of

Sash Bolts, Sash Fasteners and Sash Locks; Try Squares, Bevels, Picture Nails, and Knobs of every Shade and Variety; Rack Pulleys and Tassel Hooks; Clamps and Gas Fitting, Castings of all sizes. Also,

AGRICULTURAL IMPLEMENTS,

Such as

Rakes, Trowels, and Floral Tools.

They have large foundry conveniences and will make **Malleable and Grey Iron Castings** to order. A specialty made of CARRIAGE TRIMMINGS. Sole Manufacturers of

Wilmot's Patent Tompions and Bottle Stoppers,

The only stopper which can be depended on as serviceable in both moist and dry weather. Flasks with patent stopper.

Norwalk Lock Co., Agents, 81 Chambers Street, New York.

WAREHOUSE AT WEST MERIDEN.

summary of the leading lines of goods manufactured by the Meriden Britannia Company.

We would remark in concluding this impartial sketch of the Meriden Britannia Company, that although we have not attempted to describe the multitude of mechanical processes performed by the army of operatives in their manufactory—the correct details of any one of which would fill more than one of these pages—yet we trust we have given information sufficient to pay the general reader for his perusal; and of enough importance to the trade to warrant their careful consideration of the statistics we have supplied—statistics of a firm which for many years has aided in popularizing the American name in foreign countries, by the unrivaled excellence of its chaste and beautiful productions, the steadily increasing sales of which add no more to the profits of the company, than their spirit of high toned mercantile integrity adds to their friendly relations with the trade. And as in their wares beauty and durability go hand in hand, so in their commercial transactions, concord and fair dealing go happily and uniformly side by side.

C. A. Roberts occupies a 2 story wooden building 20x30 feet, located on Crown street, for the manufacture of stationery goods, such as inkstands, pen racks, bill files, weights, &c. He commenced here in 1852, and employs 3 persons.

The Meriden Malleable Iron Co. was incorporated in 1868, being successors of J. H. Canfield & Co. and Lyon, Augur & Co. The main building is 31x73 feet, 3 stories, brick, used for a finishing shop; 2 buildings adjoining, 50x104 feet, and 40x110 feet; another, 24x36 feet,—all 1 story. The motive power is furnished by a 30 horse power Corliss engine, made by Harris, with one cylinder boiler. The works are located near the railroad, in the northern part of the city, and can be seen from the cars, which pass in close proximity to them. This concern employs 60 persons, and manufactures, on an average, 20 tons of malleable iron and 20 tons of grey iron per month, besides house furnishing hardware, &c., &c. G. W. Lyon, President; E. K. Breckenridge, Secretary and Treasurer.

Edward Miller & Co. was incorporated in 1866, with a capital of $200,000. Edward Miller, President; F. J. Seymour, Secretary, and W. H. Perkins, Treasurer; for the manufacture of lamp trimmings for oil, fluid, and kerosene, &c. Their main building is 210x40, with wing 100x40 ft. A rolling mill was built in the fall of 1868, for the manufacture of brass for their own consumption, the building being 70x140, one story. The motive power is furnished by a 150 horse power engine, Corliss pattern, Harris make, with three cylinder boilers 4x16 feet. This company use 300,000 lbs. of brass, and do a business of $300,000 annually. The salesroom is 249 Pearl street, New York. This business was commenced about 20 years ago, by Edward Miller, using foot and horse power, making as a specialty, candlestick springs, which have continued to be made up to the present time, having barrels of them ordered in one day. This manufactory is one of the most important in Meriden, and is daily increasing its facilities for filling the many orders that come from all parts of the country.

Charles Parker commenced the manufacture of coffee mills in 1832, in a factory 25x40, 2 stories, with horse power. He now occupies 16 different buildings at East Main, corner High, dimensions as follows: No. 1, office and plating room, 18x45; No. 2, coffee mill and burnishing shop with additions, 20x26, used as a store and varnish room, also addition for a coffee shop, 15x25; No. 3, spectacle shop 20x108; No. 4, tobacco box shop and friction rollers, No. 5, coffee mill, shop, &c., 25x30, with addition used as a

store and varnish room: No. 6, vice shop, 25x160; No. 7, engine and boiler room 29x48; No. 8, finishing shop, 24x100; No. 9, store house 60x100; No. 10, screw shop, 30x200; No. 11, foundry, 66x360, with additions; No. 12, blacksmith shop 16x20; No. 13, coal house 20x20; No. 14 annealing shop, 20x20; No. 15, coffee mill shop, 30x45, with additions 28x25, for oiling shop, also a japanning room 10x15; No. 16, packing room, and carpenter's shop 30x30.

These buildings have been built from time to time, as the business increased and demanded more room. The motive power is furnished by an 80 horse power Corliss engine. Mr. P. has, in connection with business here, four other concerns controlled by him; one located 2 miles east of the city, one 2 miles west; one 2 miles south, and another half a mile west, where there are made iron spoons, ladles and forks, scales and hinges, machinery and guns, Britannia spoons, and German silver spoons and forks; employing at these four concerns at different localities, about 300 persons, besides 200 which are occupied in manufacturing coffee mills, screws, spectacles, eye glasses, tobacco boxes, vises, butts, lanterns, match safes, faucets, iron bench screws, scissors and shears, cranks and rollers, barn door hangers and rollers, gate and plain hinges, gridirons, bed keys, wagon jacks, scrapers, pulleys, lamp hooks, window springs, thumb latches, hammers, gimlets, call and hand bells, &c., &c., &c., at East Main, corner High street. Probably there is no manufactory in the country that manufactures such a variety of goods as Mr. Parker.

Among other inventions and improvements introduced to the public by Mr. Parker, is a breech-loading double barrel shot gun, which is the result of over two years of the most thorough experiments, and is claimed to be the best gun in use in this or any other country. These guns are of very superior workmanship, and are of the best materials, every barrel being tested as to strength and accuracy of range before leaving the factory. They are very simple in their construction, the barrels being self locked.

The advantages claimed for his cartridges are, that they are a central-fire, coned, metallic cartridge, and are capped with the ordinary percussion caps. Being made of metal, they can be reloaded and used any number of times desired. The sportsman is not dependent upon fixed ammunition, but can load his cartridges with ammunition of his own selection, and if this is done before going into the field, he avoids the necessity of carrying any loose ammunition with him.

Weight of the gun is from $7\frac{1}{4}$ to $7\frac{3}{4}$ lbs.

In connection is the United States Screw Company, incorporated in 1863, owned by Mr. Parker. The machinery for this branch of his business is all new and of the most approved kind. In the line of coffee mills he manufactures a very extensive variety of the best patented kinds, making more than all others in the country. The salesroom and warehouse of this establishment is at 27 Beekman street, New York.

EDGAR BEACH commenced in Nov., 1868, the manufacture of dies, &c., in Moses G. Wilder's building, Main street. Employs 5 persons.

BRECKENRIDGE & Co. commenced the manufacture of hardware and sheet metal goods in 1864, being the successors of James H. Breckenridge, who commenced in 1848. New buildings were built in the fall of 1868, covering about 23,000 square feet. The finishing shop being 70x30, with wing 30x17; the foundry 70x30. A 40 horse power steam engine is soon to be put in to drive the works. Employ when in full operation 60 persons.

C. ROGERS & BROS. commenced in 1865, the manufacture of coffin trimmings, rosetts, tea-pot knobs, spoons and forks, &c. They have lately removed to larger quarters occupying a building 20x23 and 20x20, respectively. It is their intention to manufacture caskets, linings, shrouds and everything appertaining to the trade. Do a business of about $30,000 per year.

MOSES G. WILDER commenced the manufacture of punching presses, fine machinery, and pewterers machinery in 1863. The building is 30x80, 3 stories, Mr. W. occupying only one floor. He employs 14 persons, and uses a 15 horse power engine.

The PARKER & CASPER COMPANY was incorporated in 1866, with a capital of $60,000. Samuel Dodd, President, E. S. Pelton, Secretary, Henry J. Lewis, Treasurer, Chas. Casper, General Agent. They occupy a main building, 150 x38, 3 stories, built of wood with 60x35, 1 story; also 2 other buildings, 40x25, and 70x28 respectively, both 2 stories. They manufacture silver plated and glass ware, this being the only concern in the silver ware business, that cuts its own glass. They employ 150 persons, and do a business of about $240,000 per year. The works are driven by a 40 horse power Woodruff & Beach engine with 1 tubular boiler. Salesroom, 45 Beekman street, New York. They consume 48 tons of metal, and 8,000 ounces of silver per year.

E. J. DOOLITTLE occupies a wooden building 70x22, $2\frac{1}{2}$ stories, located near the Railroad, commencing here in 1862. He employs 12 persons, manufacturing all kinds of paper boxes.

A. H. MERRIAM commenced here in April, 1868, the manufacture of turning and drill lathes, presses, punches, &c., located on Colony street. He employs 5 persons and has an engine made by Corliss, of Providence, R. I., to run the works. He uses 5 lathes, 1 planer, 1 upright drill and is soon to enlarge his works to double their present capacity,

E. D. CASTELOW commenced the manufacture of piano stools in 1860. He now occupies a building 75x22, 2 stories with wing 20x12, 1 story, located on Mechanic street. Employing 7 persons. The motive power is furnished by a 5 horse power engine built in Brooklyn, N. Y. Mr. C. consumes 25,000 feet of lumber annually in the manufacture of his stools and the boxing of them; turning out about 9 doz. piano stools per week, besides stools for stores, shops, &c.

J. B. CLARK & Co., manufacture whiffletree plates and trace fasteners; commenced here in 1868. The room they occupy being 20x20 feet; employing 2 persons.

JAMES BEADLE, brass founder, occupies a shop about 20x 30 feet; employs 3 persons, located on Hanover street, near Main.

FOSTER, MERRIMAN & Co., incorporated in 1866, for the manufacture of furniture casters, with a capital of $80,000. The building is 100x30 feet, 3 stories, with brass foundry attached, 30x30 feet; iron foundry, built in 1865, of brick 100x60 feet, with wing 30x40 feet. This company employ 60 persons and turn out about 50,000 sets of casters per month, besides screws for piano stools, &c. They make 40,000 lbs. of castings and consume 40 tons of iron per month. The motive power being furnished by a 15 horse power engine, built in 1849. This business was established as far back as 1835. John Sutliff, President, Albert Foster, Secretary and Treasurer.

S. S. CLARK commenced the manufacture of plain and japanned tin ware, about the year 1858, the business being established some 50 years previous. For the past few years he has turned his attention to the manufacture of coal oil, tin and iron goods, lanterns and lantern trimmings. The manufactory is located on Main street, and in the centre of the city, 60x90 feet, 2 stories; employs 60 persons.

WILMOT BROS. commenced the manufacture of elastic furniture and door fenders, about 1860. The monthly production is about $3,000 worth. Office on State street, opposite Meriden Britannia Co.

CHARLES PARKER,

Meriden, Connecticut,

Manufacturer of the

PATENT BREECH LOADING DOUBLE BARREL

Shot Gun.

—o—

THE Superiority of this Breech Loader over others consists in its SIMPLICITY, combined with GREAT STRENGTH and superior WORKMANSHIP.

Two Brass Cartridges go with each gun, which can be loaded and re-loaded with ordinary ammunition any number of times. Extra Cartridges will be furnished to any extent desired at $2 per dozen. The ordinary CAP is used, as we think it much safer than to transport ammunition with the cap on the cartridge.

No accident can occur, as the Breech is fastened at the top and bottom of the charge. A simple pressure with the finger presents the barrels for receiving the cartridges. It can be loaded very rapidly, and will carry as accurately as any shot gun ever made. **TRY IT.**

E. D. CASTELLOW,

Manufacturer of

Piano Stools, Store Stools,

AND

REVOLVING SHOP STOOLS, etc.,

WEST MERIDEN, CONN.

Send for Circular.

NATHAN F. GOODRICH commenced the manufacture of japanned and tin ware about 40 years ago, in a building 20 x15 feet. The business was continued two years when the firm was Goodrich & Rutty, and continued by that name till 1852, when Eli Ives and Elias Howell was admitted, making it Goodrich, Ives & Rutty. Mr. G. retired in 1864, Edwin R. Crocker and Nelson Payne admitted, making the firm Ives, Rutty & Co. They occupy a 2 story building built in the form of a hollow square 330 x 28 feet. They employ 70 persons and use 4,000 tons of tin annually. The manufactory is located nearly a mile from the Meriden Post Office, south. The first ware of this kind made in the United States was made at Berlin, Ct., and commenced here about 1828.

CHAS. H. PIERPONT commenced the manufacture of brass screws in 1864. He occupies a room 15 x 20, and employs 2 persons.

ABOUT two miles from WEST MERIDEN Post Office is the MERIDEN CUTLERY Co. Warehouse at 45 Beekman street, New York. William W. Lyman, President; J. B. Beadle, Secretary and Treasurer; J. C. Breckinridge, Manufacturing Agent. The business of this house dates its origin as far back as the year 1834, when its pioneers, Messrs. G. & D. N. Ropes, were engaged in the manufacture of cutlery in the State of Maine. They were the earliest manufacturers of American cutlery. A few years afterwards, Mr. A. R. Moen of New York, commenced the manufacture of table cutlery in Wethersfield, Conn. His business passed into the hands of Messrs. Julius Pratt & Co., of Meriden, Conn., and they conducted it for about two years, having their warehouse in Water street, New York. In 1845 a company was formed in West Meriden, which consolidated the business of the two establishments, under the firm style of Pratt, Ropes, Webb & Co., Mr. D. N. Ropes having been the junior partner of the pioneer house. He erected a factory in West Meriden, in the village of Hanover, where the firm carried on the business till 1855, when the present joint stock company was formed and succeeded to the business, under the now well known name of the Meriden Cutlery Company. They soon afterward opened their present warehouse at 45 Beekman street, New York.

The factory consists of a series of substantial buildings, located ten miles west of the Connecticut river, amid charming scenery, on the stream known as the Quinnipiac river, which empties into Long Island Sound, fifteen miles distant. From the neighboring mountain, West Peak, the shipping of the Sound can be distinctly seen. The river passes through a valley or basin which gives geological evidence on its hilly shores of having once been a bay of the sea. Ages ago the valley now busy with human industry, dotted with human abodes and adorned with green woods and fruitful fields, was filled with the rolling waters and the home only of the tenants of the deep.

On a recent journey to this pleasant locality, we availed ourselves of the occasion to visit the factory, and acquaint ourselves more intimately with the extent and nature of its manufactures. The establishment occupies from four to five acres of ground, its vast workshops being about six in number, the buildings comprising the main works and wing, four stories high, 36x300 feet; the forge shop, one story, 38x160 feet; the tempering house, one story, 20x80 feet; the joiners' repair shop, two stories, 25x50 feet; the plating house, two stories, 36x45 feet; and the steel and store house, two stories, 20x70 feet. A new and commodious building for the business offices has recently been erected. On other portions of their grounds, the Meriden Cutlery Company have built numerous tenements, which already accommodate some 60 families of their operatives, whilst the building which constitutes their boarding house provides for at least 100 men. The number of men employed ranges from 300 to 400.

We should here mention that the Meriden Cutlery Company use water power exclusively. This is supplied by their river dam, the overflow of which is 160 feet wide, and equal to 300 horse power. Within two or three years they have at heavy expense, raised the dam, and this greatly increased the power; and additions are soon to be made, which will enlarge its width to 200 feet. The fall receives the whole of the Quinnipiac river, and is now 20 feet deep.

Another evidence of the ambition and enterprise of this company is the fact that they have lately been at great expense in furnishing their works with what is termed a French turbine wheel, made for them by the celebrated Ames Manufacturing Co., of Chicopee, Mass. This colossal wheel cost about $6,000 before leaving the establishment where it was made. It is used by the largest companies in Fall River, Lawrence, Lowell, etc., and by it peculiar construction and enormous size is said to give a greater percentage of power than any other.

The value and quantity of the stock of varied materials must be immense, judging from the number of operatives and amount of machinery there constantly employed.

The coal used by the company, and consumed chiefly in the forge department, amounts to from 800 to 1,000 tons a year. The steel is both of American and English production. The materials for the handles, such as pearl, ivory, rubber, horn, and such woods as cocoa, ebony and rose, are all imported. The rubber is vulcanized in this country. Other important and costly items are the large quantities of emery, glue, belting, etc.

Original Inventors of Reversible Door Locks.

THE PARKER & WHIPPLE CO.,

West Meriden, Conn.,

MANUFACTURE IN GREAT VARIETY, RIM AND MORTISE

DOOR LOCKS,

LATCHES AND ESCUTCHEONS.

SOLE MANUFACTURERS OF

PARKER & CUMMINGS' PATENT DOOR KNOBS,

Acknowledged by all to be the best and most durable in the known world.

Axle Pulleys, Chain and Lever Bolts, Sash Fasteners, Drawer Pulls, Shelf Brackets, Wardrobe, Hat and Coat Hooks, Picture Nails, Cupboard Catches, Foot Scrapers, Window Springs, Door Sheaves, Patent Thumb Latches, Store, Door and Shutter Trimmings, Fire Iron Stands, &c., &c.

LYON PATENT DOOR BELLS,

The best and most durable Bell ever produced.

ORIGINATORS OF NOVELTIES IN BUILDERS' AND HOUSE FURNISHING HARDWARE.

A large assortment constantly on hand, and orders promptly filled. Orders received for fine Iron and Brass Castings. Satisfaction guaranteed. Send for a Circular.

J. E. PARKER, Pres. **H. J. P. WHIPPLE, Treas.**

The goods manufactured by this house embrace, beside the specialties we have mentioned, butcher and shoe knives, and all varieties which are made by other large factors. Of about 500 different styles, they are sent of immense amounts throughout the United States, where they have created an unequalled celebrity; for while the business of the house is the oldest in the country in its line, it is in most respects far superior to any other, owing to the original processes and inventions introduced into the establishment. The greater part of its employees are experts in their several departments, and its manufacturing agent, Mr. J. C. Breckinridge, has had an experience of 22 years in the business. He entered the establishment as a mechanic, and by his own energy and abilities rose by degrees to be foreman, and finally to his present arduous post, which he has occupied with signal credit for the last ten years.

The Parker & Whipple Co. Incorporated in 1868, with a capital of $100,000, being successors to Parker & Whipple, who are the officers of the company. The firm of Parker & Whipple commenced here in 1859, and continued so up to the date of incorporation. The main building is 75x100 feet, used as a lock shop. The foundry is 60x70 with wing 30x40 feet; a brass foundry 30x25 feet, and other buildings used in the prosecution of the business. The works cover about ½ an acre, and are situated about 1 mile west from West Meriden post office. This company employ 70 persons and use 300 tons per year of iron, and 50,000 pounds of brass. The motive power is furnished by a 15 horse power engine, and a turbine wheel, made by the Meriden Manufacturing Company, the fall is 25 feet, being located on a stream that empties into the Quinnipiac. These works have been added to, and rebuilt from time to time. The range of goods manufactured is quite extensive, being door locks, and knobs, builders hardware and trimmings. J. E. Parker, President; H. J. P. Whipple, Treasurer.

J. Wilcox & Co. "Sojourners" in Meriden can remain there but a short time before seeing a little northeast of the "city" a large handsome structure, neatly and even elegantly finished. Travelers through the place will notice the same on the east side of the railway, at a distance of a half a mile north of the station. The structure is the Balmoral skirt factory of J. Wilcox & Co., which company was incorporated in 1864 with a capital of $200,000, since increased to $300,000 in 1865. The business was established by Jedediah Wilcox in 1853, who made carpet bags at that time. In 1864 a company was formed. Since the business was established, hoop skirts in great numbers have been made, some 300 dozen being turned out daily; also ladies' corsets, skirts, &c. They consume 400,000 pounds of wool yearly, and 500 bales of cotton, running 25 sets of machinery.

The main factory is 305 feet long by 58 feet wide and is four stories high, the first floor being used for the office and the shipping, finishing and press rooms, the second for the weaving room, the third for the carding and spinning room and the fourth for a stock room. The rear building is 130 feet long by 35 feet wide and is used for the dye room, sorting room, etc. In this building are also the engine and boiler rooms. There are two towers attached to the building in the front and rear, the latter being 24 feet by 22 and 100 feet high, and the former 24x22 feet and 150 feet high.

The factory itself is on elevated ground, and this with the additional elevation attained brings all to view in Meriden and the surrounding towns. These two towers are useful as well as ornamental, the one in the rear being used for the elevators, the wash rooms, water-closets, etc. The great tank which holds 96 tons of water is also located in this tower. The front one is used for stairways and passages,

thus leaving all the main rooms entirely clear. The entire building is a splendid specimen of architecture, excelled by nothing in the country for durability and elegance. The foundations are 6 feet in thickness, and the walls 2 feet thick. Over 2,000,000 of brick were employed in its construction. The trimmings are of granite and Portland stone. The floors are of 4 inch plank, covered with 1¼ inch flooring, sheeted on the under side with three-fourths inch sheeting. The building is covered with a French roof, with handsome dormer windows. A heavy balustrade, finely finished, runs round the whole building upon the roof. On the summit of the high tower is a neat railing, with a lofty flag-staff passing up through the centre. As an illustration of the completeness of the work, we would mention that the stairways from bottom to top of the tower are covered with iron, and the railing is of ash with black walnut cap. The engine room is also finished with ash and black walnut trimmings. Everywhere, in every nook and corner, there is plainly seen the determination on the part of the owners to withhold nothing which could add to the strength, durability and neatness of the structure. The entire building is lighted with gas and heated with steam, and is inclosed with a neat fence 9 feet high. The architect employed was Mr. A. Truesdale, of Rockville, and the result shows that his work was well performed.

In case of fire there is every provision made for safety. There are four hydrant houses of brick, at different points outside the building, from which eight streams can be thrown simultaneously. Lengths of hose are placed upon every floor in the building, attached to hydrants communicating with the great tank in the rear tower, which is filled from Harbor brook flowing close at hand. In the engine room is the fire pump, a powerful one of the Worthington patent, which will throw 1,800 gallons of water per minute. When on trial it threw a stream of water through a one and an eighth inch nozzle over the flag-staff on the high tower, or nearly 200 feet. Strongly constructed fire escapes are attached to the outer walls, so that the operatives in the upper stories may easily leave the building if a serious conflagration should occur. Long may it be ere the fire king shall seize for his prey so noble and grand a victim.

The operatives are about 300 in number, a large number being females. For their accommodation, there is close at hand, a large boarding house, four stories high and measuring 90 by 40 feet. This is soon to be enlarged to double its present size, for their further accommodation. They turn out by their labors, 1,500 skirts per day, and are called to and dismissed from their work by a huge steam gong, constructed with three whistles of different tones made to chord. Its call can be heard at a great distance.

Before closing we must not forget to mention the office, which is elegantly furnished. It is a room 40 feet by 33, with a private office attached measuring 12 feet by 20. The tables and desks are of oak with black walnut trimmings—the railing which surrounds them being of black walnut with ash balusters, all finely carved. A large oval mirror with frame of carved oak, and numerous fine engravings, adorn the walls. The safe used is a large one of Valentine & Butler's making. Along the sides of the room are ranged oaken boxes marked with the dates of successive years since the formation of the company, and containing letters, bills, receipts, etc. The room is warmed by steam, the heat being thrown from a marble-topped radiator in the centre.

The officers of the company are as follows: J. Wilcox, President; E. I. Merriman, Secretary and Treasurer; H. H. Miller and C. H. Collins, Superintendents. Salesroom in New York, 98 Franklin street.

MERWINSVILLE, or Gaylordsville, 68 miles from Pittsfield and 42 from Bridgeport. A village of a few houses on the Housatonic Railroad.

MIDDLETOWN, 46 miles from Springfield, 20 from Hartford, 36 from New Haven and 34 from Long Island Sound. A city on the west bank of the Connecticut river, at the terminus of the Middletown Branch, connecting with the New Haven, Hartford and Springfield Railroad at Berlin. This city incorporated 1784, is very pleasantly situated on ground rising gradually from the river, and contains many beautiful residences. The wharves are commodious for shipping, there being ten feet of water for all vessels that can cross the bar at the mouth of the river. The wharves are appropriate for lines of steamboats which afford daily communication with the cities of New York and Hartford, during the summer months. The principal public buildings are the Custom House and Court House. Middletown is noted for the number of its wealthy banks, both Savings and National, some of which have recently erected banking houses that would do honor to many of our larger cities. The State General Hospital for the Insane, recently built, is under the Superintendence of A. Marvin Shew, M. D. The location is about two miles southeasterly of the city, on a tract of land about 230 acres (150 of which were given by the town of Middletown;) is healthy, sufficiently elevated, easy of access by land and water, commanding extensive views of a beautiful region. The whole length of the buildings is 768 feet, with accommodations for at least 450 patients. The building is constructed of Portland freestone, laid in broken range work, with hammer-dressed stone for corners, watertables, window-sills, and caps. The Wesleyan University under the patronage of the M. E. Church is located here, founded in 1831. The Memorial Chapel now in course of erection is estimated to cost $50,000.

The property of the University is estimated at $450,000. The Library Fund (the interest of which is refunded for books) is about $30,000.

The new library building, "Rich Hall," recently completed cost $40,000.

The College buildings command an extensive view of the surrounding country as well as of the valley of the Connecticut.

The Indian name of this city is Mattabesett. The public records commenced in 1654. The burial grounds contain many curious and antique monuments of its earliest settlers. The burial ground in the north part of the city was laid out in 1650. The height of the base of the village is 160 feet above the river and Main street is from 40 to 50 feet. The Connecticut is generally closed with ice for the most part of the winter.

The Boston, Hartford and Erie Railway is now being finished, which will bring Middletown in more direct communication with Boston, New York and New Haven.

MANUFACTURES.

W. & B. Douglass were incorporated 1839 with a capital of $250,000, being the continuation of the firm of W. & B. Douglass, who commenced here the manufacture of pumps, hydraulic rams, &c., in 1832. The works are located on Broad corner William, and are the largest and oldest manufactory of pumps in the country, if not in the world, covering 3 acres of ground and manufacturing 600 sizes and varieties. The motive power is furnished by two engines—60 and 30-horse power respectively—made by this company. They consume in one year 1500 tons of iron and 50 tons of brass, which gives one an idea of the immense amount of

W. & B. DOUGLAS,

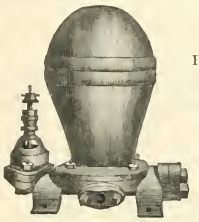
MIDDLETOWN, CONN.,

Branch Warehouse, Nos. 85 and 87 John Street, New York.

MANUFACTURERS OF THE

Celebrated Patent Revolving Stand Premium Pumps,

Patent Rotary Hand and Power PUMPS,



Patent Yard Pumps, Deep Well Pumps, Patent Double and Single Acting Suction and Force Pumps, of various styles and capacity, both Hand and Power. Patent Rotary Barrel Pumps, Patent Steam Pumps. Patent Premium Hydraulic Rams, Galvanized Pump Chain, Chain Wheels and Fixtures, Patent Cast Iron Curbs, Cast Iron Spouts for Wooden Curbs, Iron Well Wheels, Improved Premium

Garden or Fire Engines,

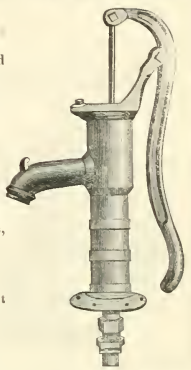
PATENT SHIP PUMPS,

Barn Door Rollers and Hangers, Ornamental Iron Horse Posts, Grindstone Trimmings, Friction Rolls and Stands, Wrought Iron Butts and Hinges, Washers, &c., &c.

ALSO THE

PATENT AQUARIUS,

A new and valuable hand force pump, awarded the highest medal by the Universal Exposition at Paris, France, 1867.



☞ Incorporated by special Charter granted by the Legislatnre of Connecticut, in 1859.

[WORKS FOUNDED IN 1832.] **BENJAMIN DOUGLAS, President.**

business done by this concern, who received the highest medals at the Paris Exposition for the manufacture of pumps, &c. This business of manufacturing this useful household necessity has been developed and brought to their present state of perfection by this company, who were the first in the United States to commence their manufacture; employ 200 persons, and their warehouse is at 85 and 87 John street, New York.

RUSSELL MANUFACTURING COMPANY occupy 5 mills, 100 x36, 3 stories each, with basement. Run 5000 spindles, and 2,000 twister spindles; using No. 25 yarn. Have 200 looms on webbing and tapes of all kinds and qualities. Employ 200 men and boys, and 300 girls. Produce about $600,000 worth of goods annually. Located at South Farms, about one mile from and really a part of the city. H. G. Hubbard, President; S. W. M. Chattaway, Treasurer; J. W. Hubbard, Secretary.

ALSOP ARMS COMPANY. Established 1860. Occupy a building 40x100 feet. Employ 40 hands. Manufactures sewing machines. Power supplied by a 25 horse power engine, made by Otis Tufts of Boston, Mass.

N. C. STILES, formerly of West Meriden, manufacturer of his patent stamping and punching presses, and iron and brass founder, and general machinist, removed to Middletown in 1868, purchasing of Wm. Stroud his iron foundry and machine shop and other buildings necessary for the prosecution of a large business. The foundry is 78x40, 1 story, brick; a machine and pattern shop 42x80, 3 stories, brick; blacksmith's shop, 38x26, brick; storeroom 37x20, brick; another 20x40, wood; office 20x26, 2 stories, brick. He employs 50 persons, pay-roll amounting to $3,000 per month. Melts 500 tons of iron yearly and produce $5,000 per month of power presses per month, and $5,000 worth of boot and shoe stretchers per year, and about $35,000 worth of special machines to order and gun machinery, ships work, &c., the business in that line amounting to $100,000. Mr. Stiles has been in business over 11 years, and his predecessor, Mr. Stroud, over 30 years. His presses are used in nearly every State and territory in the Union. See advertising page 116.

THE HUBBARD HARDWARE COMPANY was incorporated in 1864, with a capital of $16,000. C. C. Hubbard, President; F. W. Hubbard, Secretary and Treasurer. They occupy a brick building 40x60, 3 stories; a blacksmith shop about 40x60, 1 story; office and packing room 40 x 45, for the manufacture of box wood and ivory rules, drawing knives and chissels. They employ 50 persons and consume one ton of Jessop's steel and 4 tons of Norway iron per month, as well as 1½ tons of turkey boxwood, and 1200 pounds of brass. The works are driven by a 25 horse power engine, built by the Pacific Iron Works, Bridgeport. The first rules in this country, were made in New York, over 40 years ago, by parties from England. Shortly after, the business was commenced in this city, continuing up to the present time. The monthly production is 800 dozen of rules, and 600 drawing knives and chissels. The manufactory is located on Warwick street, in the south part of the city, their warehouse being at 55 Beekman street, New York.

J. R. HENSHAW commenced the manufacture of sewing machine needles, in 1866, rear 4 South Main street, in a building 100x35. He employs 10 persons.

J. W. HALL & CO. occupy the lower floor in the same building as the above, manufacturing files, of which they turn out 250 dozens per month, part of which are re-cut. Use up $100 worth of steel per month; employ 9 persons, and do a business of about $7,000 per year.

MANNING, BOWMAN & CO.,

Middletown, Conn.,

Manufacturers of

Britannia & Silver Plated Goods,

PATENTED FIRE PROOF

— And —

PORCELAIN LINED TEA AND COFFEE POTS.

The principal feature of our **PATENT FIRE PROOF TEA AND COFFE POTS** consists in the lower portion being composed of fire proof metal, which allows of their being placed upon a hot stove or range without the danger of melting. We have the pleasure of announcing to the trade that after two years experimenting we have finally succeeded in perfecting our

PORCELAIN LINED TEA AND COFFEE POTS.

It is unnecessary to tell any lady of the superiority a porcelain vessel possesses over any metal one as the general verdict is that good tea cannot be made in anything but porcelain, their great liability to break being the only reason why they are not universally used. The combination of porcelain lining in

Metal Tea and Coffee Pots

removes this difficulty and for the first time an article which will not wear out or break, and at the same time a perfect one for the purpose designed is now offered.

F. W. & O. Z. Pelton, commenced the manufacture of plated silver and Britannia ware in 1854, at 4 South Main street. They occupy one floor of a building 100x35 with ell 50x50 feet. This company consume 1500 pounds of metal per month; 1500 ounces of silver annually, and employ about 20 persons. Many of their goods is sold in the rough, to be finished up by other parties.

The Sanseer Manufacturing Co. was incorporated 1823, with a capital of $20,000. C. F. Browning, President; J. H. Goodrich, Treasurer; W. S. Whitney, Secretary. Their main building is 52x30, two stories, with ell 28x36, one story; foundry 56x40; annealing shop 37x28; blacksmiths' shop and brass foundry 26x32. This company manufacture butts, plate locks, bedstead joints, coal shovels, and light castings. Employ 35 persons, and consume about 200 tons of iron annually. The power here is furnished by a breast wheel, with 10 feet fall, situated on the Sanseer stream, from which this company takes its name, about one mile from the post office, at South Farms.

Manning, Bowman & Co. was incorporated in 1864, for the manufacture of silver plated and Britannia goods. Jos. H. Parsons, President; Robert Bowman, Secretary; E. B. Manning, Treasurer; Edward Furniss, Superintendent. Their manufactory is located in the western part of the city, on a tributary of the Connecticut, occupying a 4 story building 50x60, for manufacturing, 1½ story building 25x18, office and show room, and a 2 story building 20x30 for burnishing. This company employ 100 persons and do a business of about $125,000 per year. They own and control valuable patents for manufacturing fire proof tea and coffee pots and syrup cups, besides manufacturing all kinds of silver plated and Britannia goods. This company in addition to other patents owned by them, issued in the fall of 1868, a patent that bids fair to be one of the most valuable inventions in their line of goods. It relates to an improvement in silver plated Britannia tea and coffee pots. It is a well known and admitted fact that tea steeped in metal is more or less deleriously affected by the metal (so much so that a popular objection exists to metalic tea drawers,) yet to earthen vessels for this purpose the liability to breakage creates an objection. This invention consists of a hard metal body lined with porcelain or similar material hardened, and after being so lined the body is covered with a softer metal as Britannia or tin, which possesses all the advantages of a porcelain, silver plated or fine Britannia tea pot. The success that must attend this new invention when put into market is self-evident, and they will ere long take the place of the old style.

The Middletown Plate Co. was incorporated in 1866, with a capital of $20,000. They occupy a 3 story brick building 28x90. The power is a 15 horse power Woodruff & Beach engine. They use 3 tons of white metal and $1,000 worth of silver per mouth. Employing 70 persons. E. Penfield, President; Edward Payne, Treasurer; Henry Bullard, Secretary and G. H. Hulbert, Superintendent.

Union Mills were incorporated in 1854 with a capital of $25,000, which has since been increased to $31,250. Henry G. Hubbard, President; Geo. A. Coles, Secretary; H. H. Smith, Treasurer. This company run 2 mills, one in the city on the Connecticut River, with 3 run of stone, and the power furnished by an 80-horse power engine built by Otis Tufts, Boston. An elevator attached to this mill is the only one in the State, and is capable of storing 1,200 bushels per hour. It was made by Geo. McLean, of East Boston. This mill has a capacity of 60 barrels of flour per day. Another mill, situated 1 mile from the city, has 4 run of

BURROWS & HUBBARD,

—Manufacturers of—

Croquet, Doors & Blinds, Tool Handles of all Kinds;

WOOD TURNING AND SCROLL SAWING.

Foot of Centre Street, - - - - - - - Middletown, Conn.

stone, grinding 200 bags of meal daily beside other (custom) work. A schooner of 140 tons burthen is run by this company exclusively for their own business. They employ 13 persons and do a business of about $360,000 per year.

FLAGG & BONNELL commenced the manufacture of machinery for plated and Britannia ware, also dies and moulds and machinery to order, in 1868, being the continuation of F. W. Flagg, who commenced here in 1864. They now occupy one floor at 4 South Main street, 60x30 feet, employing 7 persons. They use 5 lathes, 2 planes, 1 upright drill and 2 gear cutters.

WILLIAM WILCOX & Co. commenced the manufacture of pad and plate locks in 1845. They occupy a main building 180x24 feet, with 2 ells, 22x24 and 18x30 feet respectively, 2 stories; foundry 28x36 feet, 1 story; store house 36x40 feet, 2 stories; Office and packing room, 20x36 feet, 2 stories; brass foundry 18x30 feet. They employ 50 persons, and the production is 100 dozen pads and 25 dozen plate locks per day. A new water (overshot) wheel was put in in the fall of 1868, 24 feet in diameter, the fall here being 30 feet, situated about 1 mile south of the city on a branch of the Pamecha, a small river that empties into the Connecticut.

ALLISON BROTHERS commenced the manufacture of soap and candles as successors to their father, S. S. Allison, in 1856, who established the business in 1826. They occupy a 2 story wooden building, 60x36, and do a business of about $50,000 per year.

THE WARWICK TOOL CO. was incorporated in 1865, with a capital of $15,000, for the manufacture of machinists' small tools. E. D. Nye, President; J. B. Sibley, Secretary. They occupy 2 rooms at 4 South Main street, 40x30 and 30x20 feet respectively. They use in the construction of their tools, 5 lathes, 1 planer, 6 milling machines, (Lincoln's pattern,) 1 upright drill, 1 screw machine, and 1 edging machine. Employ 12 persons.

WILCOX & HALL commenced the manufacture of galvanized iron ship work in 1850. They occupy about 5,000 square feet, at 4 South Main street, and do a business of about $50,000 per year.

THE NATIONAL MANUFACTURING COMPANY was incorporated 1867, and manufactured gun locks, &c. In January, 1868, George N. Ward, assumed the proprietorship, the business being conducted under the same name as before. The building is situated on Spring street, and is 30x40 feet, two stories, with an adjoining building 25x35. This concern have a 15 horse power engine, Burton's make, that runs their works. Employ 15 persons, and turn out about 100 gun locks daily.

S. A. COREY commenced the manufacture of machinery, at 29 College street, in 1867; employs 3 persons, and occupies a building 30x30 feet.

BURROWS & HUBBARD are located at the foot of Centre street, in a brick building 120x40 feet. Employ 12 persons for the manufacture of croquet games, tool handles, and doors, sash and blinds. The motive power is furnished from a 30 horse power engine, made by Tufts of Boston. This company ship goods to all parts of the country, and do a business of about $25,000 per year.

MILFORD, 9½ miles from New Haven and 65½ miles from New York, on the New York & New Haven Railroad. The Indian name is Wepawaug: contains 5 churches. Population estimated at 3,500.

N. A. BALDWIN & Co., manufacturers of gents' and ladies' straw hats. This company commenced business in 1852, and their works now cover about 2 acres of land, and are divided into large 3 and 4 story buildings, for the different branches of the business. Their motive power consists of a 20 horse power engine, built by M. & T. Sault, of New Haven, with the boiler, built by the well known firm of Woodruff & Beach, also another, built by the Bridgeport Iron Works. This company employs about 700 persons.

THE AMERICAN HAT WEAVING CO., after several years spent in experimenting in weaving hats of hair, wool, cotton &c., incorporated a company in 1867, with a capital of $400,000, appointing A. Reed, President, and A. C. Wetmore, Secretary and Treasurer. The company now employ 50 hands, turning out about 12 dozen hats per day. Their main building is 115x24 feet, 2 stories, used in preparing stock and weaving; 2d building 70x24 feet, 1 story, machine shop, attached to the machine shop is another building 30x40 feet, 2 stories. Motive power derived from a 10 horse power steam engine, with 25 horse power flue boiler, made by the Bigelow Manufacturing Company. The weaving of hats is a new branch of industry, never having been before attempted in this country.

BEACHER & MILES, manufacturers of carriages; such as buggies, rockaways, &c. Their buildings cover about 8,000 square feet, being mostly 2 stories and used for the various departments required by carriage makers. Employ 30 hands; making about 400 carriages per year. Motive power derived from a 15 horse power turbine wheel with 10 feet fall.

MONTVILLE, 6 miles from New-London and 7 from Norwich. A small manufacturing village on the New London Northern Railroad.

MOOSUP, 32½ miles from Providence, and 57½ from Hartford. A manufacturing village on the Providence, Hartford & Fishkill Railroad, containing 3 churches and 1 hotel, the Kenyon House, erected and opened to the public in 1867, by Peckham Kenyon, Esq.

THE MOOSUP COTTON MILLS, (owned by F. B. Loomis, New London,) are situated one-fourth of a mile from the station. The mills were erected by Jos. S. Gladding, in 1832. The main mill is 100 x 40 feet, 4 stories, stone; cot-

ton house 100 x 24 feet, 1 story; machine shop, 60 x 12 feet, and dressing room 40 x 25 feet. They employ 60 persons; run 3,100 spindles and 75 looms; consume 20,000 pounds of cotton per month. A 4 feet Cushman wheel supplies the power. Orin F. Smith, Agent and Superintendent.

SANDERSON & CROW, manufacturers of woolen goods, were incorporated 1867, with a capital of $25,000. The main mill is 100 x 40 feet, 5 stories; finishing room, 60 x 40 feet, 2 stories; dye and dry room 100x30 feet; office, 18x20 feet, all stone. Employ 115 persons, run 38 looms, 2,588 spindles; consume 20,000 pounds of wool per month, producing 21,000 yards of fancy cassimeres. A 48 inch Leffel turbine wheel supplies the power. Kendall, Opedike & Co., Agents, New York.

MOUNT CARMEL, 8¾ miles from New Haven, 67¼ from Northampton, and 84¾ from New York, on the New Haven, Hartford and Springfield Railroad. The population of this village is about 200, one church.

FREDERIC IVES & Co. commenced business in 1863, for the manufacture of carriage axles. The business was established in 1833, by Henry Ives. Their works consist of several buildings, 130x30, one story and basement; two small buildings, 30x30, one story each. The motive power for these buildings is furnished by a 23 inch turbine wheel of 25 horse power. Their foundry building is 50x40, two stories, with blacksmiths' shop attached, 75x40, one story with ell 30x25. They also have here a 25 horse power turbine wheel, for motive power. Employ 40 hands, and turn out about 75 set axles per day.

LAMSON SESSIONS & Co., manufacturers of carriage tire, bolts and forged nuts. Commenced business in 1866. Their main building is 70x30, two stories, ell 64x30, one story comprise all the room this firm needs to carry on their business. They employ 50 hands, turning out 2,500 bolts and 1,500 lbs. nuts per day.

The bolts and nuts are made by machinery driven by a 20 horse overshot wheel, 18 feet diameter, 6 ft. bucket. They also have a 20 horse steam engine, and a locomotive boiler, made by the Washington Iron Works.

MYSTIC, 134 miles from New York, and 98 miles from Boston, a thriving village on the New London, Stonington & Providence Railroad, on the east bank of the Mystic River. Vessels of 400 tons burthen can land here. The place is noted for its ship building, some of the largest and fleetest are built here, there being 5 large ship yards and several builders of small boats. There are 5 churches and 2 banks. Population estimated at 3,500.

MYSTIC RIVER HARDWARE MANUFACTURING CO. are making Gullett's patent steel brush, cotton gins, book binders machinery, &c. The present company was established in 1865, having been formerly run by the Reliance Machine Company many years. There are quite a number of buildings which are of the following dimensions. The main building is 100x60 feet, consists of two stories and is constructed of wood. The foundry is 40x90 feet, constructed of wood, one story high. The brass foundry is 20x40 feet, and is one story high. The milling room and office is 80x20 feet, one story high,—the part over the office being two stories in height. The smith shop is 30x40 feet, one story high and is built of wood. The dry house being the same distance from the main building is 10x16 feet, part of which is built of stone and the remainder of wood, and is one story in height. The sand and lumber sheds cover a space 50x100 feet. The employees at present number about 100. The machines in number about 70 or 80, are used mostly for iron work. About 400 cotton gins, weighing some 1,000 lbs. each are made per year. The weight of iron machines made per year is about three times the weight of the cotton gins. The motive power is derived from one of Cranston & Bates engines of 30 to 40 horse power and one tubular boiler. There is employed a day and night watchman. They have agencies situated in the Southern States.

MYSTIC WOOLEN COMPANY, manufacture cassimeres, beavers, &c. Post office address, Mystic Bridge, Ct. The company was incorporated in 1865. They occupy a nice 2 story wooden building, 420 feet long and 44 wide. Some 80 employees are now at work, running 44 looms, 4000 spindles, and using about 1200 pounds of wool per day. One engine of 90 horse power, built by Mystic Iron Works, and a tubular boiler furnishes the necessary motive power. There are also a number of nice buildings near the mill, one being some 160x45 feet, two stories, wood.

NAUGATUCK, 27 miles from Bridgeport and 5 from Waterbury. A manufacturing village on the Naugatuck River and Naugatuck Railroad, containing 4 churches and 3,000 inhabitants.

MANUFACTURERS.

THE TUTTLE MANUFACTURING COMPANY was organized February, 1851, with a capital of $30,000, which has since been increased to its present amount, $100,000, of which A. J. Pickett is President and Treasurer, E. H. Blakeslee Secretary; Luther Gaylord, Superintendent. They have six main buildings and several sheds, which are occupied as follows: No. 1, of brick, forging shop, 1 story, 135x50; No. 2, hammering-up shop, of wood, 100x30; No. 3, tempering shop, of wood, 60x22; No. 4, polishing shop, of wood, 98x40; No. 5, finishing shop, of wood, 60x30; No. 6, storehouse, of wood, 80x30 and L 60x25, also wood; steam bending shop, of wood, 27x15. Of material they use about 20 tons of steel per month, and turn out about 1,300 dozen hoes, 700 dozen rakes, 700 dozen forks per month. The power is water and steam. Steam power, 75-horse; water power, 2 breast wheels, each about 50-horse power; occupy 2½ acres of ground; employ 75 men.

The above shops are all 1 story with the exception of the finishing shop and storehouse, which are 2 stories. A 75-horse power Woodruff & Beach engine and 2 of their flue boilers assist in driving the machinery.

GOODYEAR'S GLOVE CO. Warehouses, 205 Broadway and 162 and 164 Fulton street, New York, and 417 North 4th street, St. Louis.

Geo. M. Allerton, President; R. G. Allerton, Treasurer; Robert S. Walker, Secretary.

We desire to call the attention of the trade to the novelties comprised in the greatly enlarged stock of India rubber goods at the warehouse of the above firm, which was established in 1844, and whose New York warehouse, during the past 6 years, has been located at 205 Broadway. The firm has also a much larger warehouse in St. Louis, and supply the trade throughout the country with every variety of rubber manufactures from their factory at this place, which consists of a score of buildings occupying two lots of land, one of which is 200 feet by 350 feet in dimensions, and the other 200 feet square. On the former, the process of cleaning, grinding, spreading and curing are performed, by the aid of a variety of machinery, thus preparing the rubber from the raw material; and in the workshops on the latter, the pre-

pared article is cut out, fashioned into almost innumerable articles of general utility, and packed for shipment throughout our own and to foreign countries.

Owing to the great increase of the trade of the house, and the consequent demands for enlarged warehouse room, their store at 205 Broadway has recently received a material addition by its extension into Fulton street, at Nos. 162 and 164, which constitutes a second warehouse, which the firm now devote entirely to the wholesale department of their business.

Thomas Lewis & Co. Incorporated 1866, with a capital of $80,000, for the manufacture of fancy cassimeres. Thomas Lewis, President; George T. Platt, Secretary, George White, Superintendent. This company run six sets woolen machinery, with power derived from a 60 horse power overshot wheel, also 40 horse power steam engine with 2 flue boilers. This company uses about 600 lbs. wool per day, and turns out about 3000 yards cassimeres per month. Their buildings are all built of stone. No. 1. 154x50, 2 stories, weaving and filling; No. 2 70x50, two stories, carding and gigging; No. 3, 36x40, two stories, picking and sorting; wheel house and dye house 55x60. This company employs about 90 hands throughout the year.

The Allerton Iron Works Manufacturing Company. Incorporated 1868. Capital $50,000. George Slaee, President; George M. Allerton, Treasurer; W. S. Humphrey, Secretary; John C. Stevens, Superintendent, at the works. Manufacturers of steam fire engines, building 200 x40, 2 stories. Employ 60 men, using a 20 horse power engine of William Burden's make, and one tubular boiler, same make. This company has not been running but a short time, but have the facilities for turning out over 50 steam fire engines of first class make per year.

Goodyear's Metallic Rubber Shoe Co. Incorporated 1837. The first officers of the company were Samuel J. Lewis, President and Treasurer; A. C. Andrews, Secretary. The company now has a capital of $300,000. James E. English, President; George H. Scranton, Treasurer, and George A. Lewis, Secretary. Manufacturers of overshoes and rubber shoes generally. The dimensions of their main buildings are as follows: No, 1, 150x30, 3 stories, ell 60x50, marking and packing; No. 2, 140x85, 3 stories, grinding rooms cutting, engine house attached 60x50, built of brick, with iron roof, containing a 100 horse power engine of Woodruff and Beach pattern. The boiler also same make, also, water house with a 250 horse power overshot wheel, being one of the largest used in the country; No. 3, 40x60 2 stories, baking and varnishing; No. 4, 100x40, 2 stories, baking and drying; other smaller buildings used as carpenters' shops and store houses. This company turn out about 100 cases shoes per day.

Star Pin Co., located at Derby, occupy a 3 story building 54x26, and a 1 story building 18x20, for the manufacture of pins. They employ 12 hands; produce 60,000 packs pins, and do a business of $30,000 per annum. To drive their machinery they use a Tyler iron water wheel.

NAUGATUCK JUNCTION, 12½ miles from New Haven, 63½ from New York, on the New York & New Haven Railroad. The Naugatuck Railroad Company run their cars over the track of the New Haven Railroad from Bridgeport to this place.

NEW BOSTON, situated 64 miles from Boston and 6 from Southbridge. The village is about one mile from the depot, of about 150 inhabitants, on the Boston, Hartford and Erie Railroad.

NEW BRITAIN, 13¾ miles from Hartford and 18¾ from Waterbury, on the Providence, Hartford & Fishkill Railroad. A branch 2½ miles in length connects with the New Haven, Hartford & Springfield Railroad at Berlin. Estimated number of population, 8,000; rate of taxation, 12 mills on $1; amount of taxable property, $3,668,938; number of churches, 7; number of banks, 1 national, 1 savings; hotels, 3; number of polls, about 1,600; joint stock companies, 14; aggregate amount of capital, about $2,500,000. 1 weekly newspaper, the New Britain *Record*.

MANUFACTURERS.

The Russell and Erwin Manufacturing Co. The foundations of the Russell and Erwin Manufacturing Company were laid by the brothers Stanley, two enterprising inhabitants of New Britain. In 1830, William B. Stanley, Henry W. Clarke and Lora Waters established a machine shop on Main street, which was bought by Frederick T. Stanley, in 1833. To Mr. Stanley the lock business owes its origin. Only a few small manufactories of door locks, at that time, existed in the United States. The first plate locks ever made in the country were made by Mr. Stanley, in 1833. In 1835 the concern passed into the hands of F. T. & W. B. Stanley, and had at that time already acquired a wide reputation. It was among the first, if not the very first establishments in the State to employ steam power—the first engineer being Westell Russell, at present sheriff of Hartford county. In the latter part of 1835, Emanuel Russell, a native of Litchfield county, but a resident of New York, who died nearly 90 years of age, in February, 1865, Smith Mattison, of New York, and the firms F. T. & W. B. Stanley, and T. & N. Woodruff, of New York, purchased a large lot of land and formed a company for the manufacture of locks; the title being Stanley, Woodruff & Co. In the beginning of 1830, the Woodruffs, W. B. Stanley, and Emanuel Russell, retired, and the business was conducted under the name of Stanley, Russell & Co.; the new partners being Henry E. Russell and C. B. Erwin, the latter coming from Booneville, Lewis county, N. Y. The firm was again changed, at the commencement of 1841, to Mattison, Russell & Co., F. T. Stanley retiring, and John K. Bowen, of New York, taking his place. It was just before this change that steps were taken to establish a warehouse for the sale of its manufactures in New York city, the sales having previously been made by commission.

Owing to the death of Mr. Mattison, the firm title of Russell, Erwin & Co. was adopted January 1st, 1846, which, in July, 1850, was dropped for that of Russell & Erwin, Mr. Bowen selling his interest to the other partners. Several of the manufacturers of New Britain, in 1850, entered into negotiations with this firm, which resulted, on the first of January, 1851, in the formation of the Russell & Erwin Manufacturing Company, with a capital of $200,000, a sum which, in 1864, was increased to half a million. Such are the principal incidents in the history of a business, which, in the space of a little more than a third of a century, has developed into such enormous proportions.

The business annually done by the Russell and Erwin manufacturing Company, amounts to several millions of dollars. It has independent warehouses in New York, Philadelphia and San Francisco,—the first named alone employing seventy men—and controls portions of warehouses in Boston and Baltimore. Through these its fabrics are sent all over the United States, and beyond our borders to Australia, China, South America, and other distant quarters of the globe. Its locks and its fabricates, almost every variety except "hyacenthine locks" and "gory locks" are found everywhere. The tea vender of Hong Kong, the gold-dust trader of Melbourne, the tobacco dealer of Havana, the

wholesale merchant of Valparaiso, the shopkeeper of Honolulu, all fasten the doors of their stores with these Russell & Erwin locks. They are used, too, for a multitude of purposes, from that of making secure great warehouses, down to that of closing against unruly children the cupboards of our housewives. The company has published besides its own large list, an immense illustrated general catalogue of American hardware of more than four hundred quarto pages, which is in universal use by the trade. Its works cover more than five acres of ground. It owns in addition ten houses and blocks, containing twenty-five tenements. It gives steady employment to nearly 500 hands, and uses two steam engines of a combined force of over 100 horse power.

The present President of the company is C. B. Erwin, its Treasurer is Henry E. Russell, and its Secretary is L. Woodruff. The latter is also general manager, assisted by M. J. Woodruff. The manufactory Superintendent is Horace Eddy, who has been connected with the concern for 25 years. The New York warehouse is under the charge of Isaac D. Russell, James B. Ogden and Richard P. Bruff. The Philadelphia warehouse under that of James E. Terry, and the San Francisco warehouse under that of J. W. Stow. The influence which this large industrial house has exerted upon the prosperity of New Britain, can hardly be over-estimated. The borough has grown up with its growth. Its owners, in all the changes which it has undergone, have always been men of a broadly liberal and public-spirited character. They have certainly deserved the remarkable success which has crowned their energy and activity, and which has made their manufactory one of the leading examples of New England enterprise.

The Stanley Rule and Level Company. The company, as now organized, commenced business in 1857, though the several branches included in their large variety of manufactures, had been carried on separately for a considerable time previously, under the ownership and direction of the different individuals and firms combined in the present organization. The amount of capital used in the business has been increased from $50,000 in 1857, to $200,000 in 1867, and the business of the company enlarged proportionately.

The leading articles manufactured by the Stanley Rule and Level Company, are boxwood and ivory rules, levels, try squares, gauges, mallets, hand screws and handles of every description. Nearly 200 persons are employed in all departments of the business.

The company now own and operate the rule factory (formerly E. A. Stearns & Co.) at Brattleboro', Vt. The variety of rules manufactured at this establishment alone, embraces over 90 different styles, and about the same number of styles is produced at the New Britain factories.

Two large steam engines furnish the power used at the New Britain factories, and water power is used at Brattleboro'. The company's warehouse is at No. 57 Beekman street, New York.

Malleable Iron Works was incorporated in 1863, with a capital of $50,000. E. R. Swift, President; M. C. Swift, Secretary and Treasurer. The works are located near the Railroad, one-fourth of a mile from the depot, west. The main building is 100x90 feet, used as a foundry; the finishing room is 60x57 feet, 2 stories, all built of brick. Employ 80 persons, manufacturing saddlery hardware and castings, melting 3,000 pounds per day and do a business of about $100,000 per year.

Edward Doen, commenced the manufacture of latches, spring bolts, rail screws, and curtain fixtures in 1858. He occupies a building 90x22 feet, 3 stories, built of wood, with wing 30x15, 1 story; another 12x15, 2 stories, with small out buildings adjoining. The works are to be enlarged in 1869, owing to the increase of business. He employs 15 persons, using 2 tons of cast iron, 500 pounds of malleable iron 200 pounds of cast brass, 500 pounds of hoop iron, 300 pounds of sheet brass per month, doing a business of $25,000 per year

North, Stanley & Co. commenced the manufacture of hooks and eyes in 1850, being successors to S. J. North & Co.; the business was established in 1836. They occupy a part of 2 floors in a building 100 x 45 feet. They employ 12 persons in the manufacturing, and 600 to 800 families in putting them on cards, producing 150 great gross per day.

Judd & Blakeslee commenced the manufacture of household hardware in 1863, as successors to M. Judd & Co. The business was established by O. S. & M. Judd in 1845. The establishment is located on W. Main street, 65x25 feet, 3 stories, with wing 30x18 feet, 2 stories; another 12x14 ft. 2 stories, and last a building 20x30 feet, 1 story. The motive power is furnished by a 12 horse power engine, built by American Machine Works, with a 25 horse power Harrison boiler. They employ 55 persons and use half a ton of iron and brass per day, and do a business of $50,000 per year.

Among other establishments that make New Britain noted as a great manufacturing place, is the Taylor Manufacturing Co. which was incorporated in 1868 with a capital of $35,000. O. E. Taylor, President, W. W. Taylor, Sec'ry. The works are about ¼ mile from the depot, and comprise a building 90x30, 2 stories, built of wood, with wing 20x30, 1 story; brass foundry, 20x60, 1 story; employ 35 persons, making brass saddlery hardware, which, by the way, is the only concern in the country where this style of goods are made; brass curb chains, door bells, meat cutters, iron, brass and plated hardware. This concern is the consolidation of A. E. Taylor and H. Butler & Sons. Probably no concern in this place has had such a proportionate increase of business as this establishment, since its commencement. Practical and ingenious men employed, give to this establishment the reputation that it has enjoyed since its organization. Liberal remuneration to the employed secures the best artisans, who with the aid of complete and valuable machinery, make this company a hard competitor in their line of business.

J. Shepard & Co. was incorporated in 1863, Richard Butler, President; J. Shepard, Secretary and Treasurer. The manufactory is situated about ⅜ of a mile northeast of the depot. The building is 115x35, 3 stories, with wing 80x40, 1 story, built of wood. Another building, for an office, 80x25, 2 stories. They manufacture umbrella and parasol stretchers, patent Storm King umbrella frames, also boxwood and ivory rules. They employ 50 persons. The manufactory is yet in its infancy, new machinery being put in and arrangements made for a large and successful business. The power is obtained from a small brook, the fall being 40 feet with a capacity of 50 horse power. The wheel is 40 feet in diameter, and one of the largest in the State.

The New Britain Bank Lock Co. commenced the manufacture of Isham's key register bank locks and Pillard's dial bank and safe locks, in 1857. The works are located in the establishment of P. & F. Corbin. They employ 15 persons. Salesroom in New York, 24 Warren street.

The New Britain Lace Co., commenced the manufacture of silk and cotton fancy lace, in April, 1868, capital $20,000 John B. Talcott, President, Agent and Teasurer. John Officer, Secretary. This company intend to enlarge their works.

The American Hosiery Co. was incorporated in 1868, capital $200,000. Henry Stanley, President, John B. Talcott, Secretary and Treasurer. A new building was built in the winter of 1868 and 1869, 158x51 feet, 3 stories, with

O. E. TAYLOR, President. - - - - W. W. TAYLOR, Secretary.

Taylor Manufacturing Company,

MANUFACTURERS OF

BRASS SADDLERY

Hardware,

BRASS

CURB CHAINS, DOOR BELLS,

MEAT CUTTERS

AND

Iron, Brass and Plated Hardware,

NEW BRITAIN, CONN.

☞ SEND FOR CIRCULAR! ☜

ORDERS SOLICITED.

wing 44x90 feet, 4 stories built of brick, and decidedly an ornament to the place. A 100 horse power Brown's engine is to furnish the power. The company manufacture hosiery and knitted goods, and will not be in full operation before the fall of 1869.

The Union Manufacturing Company was incorporated in 1868, with a capital of $150,000. T. W. Stanley, President; J. Warren Tuck, Treasurer. They are iron founders and manufacturers of butts with steel washers, grate hinges, latches, iron pumps, &c. The main building is the iron foundry 168x42, 1 story, built of wood, with wing 80x40; also a wood factory 135x35, 2 stories; office and packing room 120x35, 3 stories, brick and wood. They employ 125 persons; manufacture 7500 pounds of castings and 300 doz. common cast butts per day, besides 50 dozen of fancy butts. The manufacture of cistern and yard suction pumps has been carried on for about a year, making about 100 per day, when in full operation. The motive power is furnished by a 60 horse power Woodruff & Beach engine, with 2 tubular boilers. The success of this company is in the main due to Hon. S. W. Stanley, the President of the company, and who projected the enterprise which has been conducted so successfully to the pecuniary advantage of all concerned. Warehouse, 77 John street, New York.

Wm. B. North commenced the manufacture of fine gold jewelry in 1827. W. A. Churchill, one of his apprentices, and now the head of the house, was admitted a partner in 1832. North & Churchill continued till 1840, when Mr. North died, and James Stanley, a nephew of his was admitted; Churchill & Stanley continued till 1854, when Chas. A. Warner and Chas. M. Lewis was admitted, making the firm Churchill, Stanley & Co. Mr. Warner sold his interest after a short time, the same name continuing. Mr. Warner died in the summer of '68. In 1864 E. B. Dana was admitted, making the firm Churchill, Dana & Co. He has charge of their sales-room in New York, at 180 Broadway. The manufactory is 48x45, two stories, built of wood. They employ 30 persons, and do a business of about $100,000 per year. This firm have resisted all temptation of making plated jewelry, and have maintained a reputation justly earned for manufacturing from the first, fashionable solid gold work.

Directly opposite the Russell & Erwin Manufacturing Company's works, are The Stanley Works, which were incorporated in 1852, with a capital invested of $200,000. F. T. Stanley, President; William H. Hart, Treasurer. Going back to 1844, we find F. T. Stanley, manufacturing bolts, in a small shop, employing 10 persons, and it is from this date that this company can be said to have been established. The company like many in this place, has grown to immense proportions and doing a business that far outreaches the most sanguine expectations of its projector, who is now President. The main building is built of wood, 100 x40, 3 stories and attic, with wing, 160x30, 1 story, where are made strap and T hinges, butts and door bolts. A machine shop and hardware manufactory 30x50, 3 stories, wood; packing room and office 25x75, 1 story wood; also, the "original" bolt shop, 25x175, 1 story, used for the manufacture of wrought iron butts; store house 50x35, 3 stories with wing 60x35, 1 story. This company employ 200 persons, and produce about 25,000 hinges, butts, and bolts per day.

The motive power is furnished by 2 engines of 60 horse power. A survey of the works, through the kindness of the Treasurer, Mr. Hart, convinced us of the superior facilities they have for rivalling their competitors. Valuable and intricate machines, made on the premises by skillful and ingenious machinists, were shown to us in operation, with the various attachments, saving time and money—one simple attachment alone saving the company $600 per year. These shops are kept under lock and key so valuable are the machines for their manufacturing purposes.

A machine shows us almost made a butt, and the different processes through which it went made it very interesting. It is needless for us to comment farther on the many conveniences and valuable machines this company possess for the successful working and production of their goods, to convince the public of their facilities. Warehouse 58 Beekman street, New York.

The Humason & Beckley Manufacturing Co. was incorporated in 1865, with a capital of $35,000. W. L. Humason President and Treasurer; F. W. Beckley, Secretary. The main building is 245x28, 2 stories and basement, built of brick, with wing 45x40, 2 stories wood; blacksmith's shop and other buildings attached. They employ 60 persons. The motive power is supplied by a 30 horse power engine, built by M. & T. Sault. They manufacture pen and pocket cutlery, and wrought hardware and hammers. Warehouse, 58 Beekman street, New York.

The New Britain Co. was incorporated in 1848, with a capital of $200,000. F. H. North, President, H. C. Stephens, Treasurer and J. K. Kilbourn, Superintendent. This company are the pioneers of making fine goods in the United States. The establishment is located a short distance from the depot on Elm street, corner Chestnut. It is 200x50 feet, 4 stories, built of brick, with a wing 86x32 feet, 3 stories, brick; also, another 86x54, 4 stories, with dye house, boiler and bleach house attached. They employ 300 persons, and do a business amounting to $500,000 per year. They consume 1,500 pounds of wool per day, and run machinery equal to 16 sets. The power is supplied by a 100 horse power engine, made by Tufts, of Boston. Warehouse 24 Warren street, New York, where can be found merino vests, pants, shirts, drawers, scarlet goods, hosiery, gloves, &c., all made at this manufactory.

In May, 1849, Edward Doen, Philip Corbin and Frank Corbin, formed a co-partnership under the name and firm of Doen, Corbin & Co. To engage in manufacturing, at that time with small means, was considered a rather hazardous undertaking; but as the parties composing the firm, were all young, enterprising, and possessed practical knowledge of the business, they foresaw success, though they had but a capital of $600 to commence with, and the encouragement which has attended their enterprise speaks well of their foresight and energy. The machinery in their shop was driven by horse power, the working force besides the firm was one man. The first goods made by the firm were brass ox balls, lamp hooks, and lifting handles, the assortment being increased from time to time as fast as new patterns could be procured. In November, 1849, Mr. Doen, withdrew from the firm, selling his interest to H. W. Whiting, and the name of the firm changed to Corbin, Whiting & Co., but in January, 1851, Mr. Whiting sold his interest to the remaining partners who continued under the name of P. & F. Corbin. In February, 1854, the company was incorporated with a capital of $50,000, bearing the same name which it still retains, F. H. North, was chosen President; Philip Corbin, Treasurer; the latter of whom also had charge of their New York warehouse until March, 1859, when he withdrew from the company. In February, 1858, Mr. Charles Peck, became Secretary of the company, which position he still retains. In 1860, Mr. John M. Spring became a stockholder, and then Superintendent, and Mr. Andrew Corbin, also investing, became their Agent in New York.

In 1865, the business and capacity of the company was materially enlarged, their iron foundry being 225x40 feet, 1 story; the main building is 156x44 feet, 4 stories, with attic

and wing 24 x 40 feet, 4 stories and attic. A new brass foundry is to be built this summer (1869,) 30 x 200 feet, 1 story. When the business which has so steadily grown to its present importance, was first commenced, after paying for the house, power and machinery, the company had left a working capital of just sixty-eight dollars. This was not a very flattering condition of affairs, but all the members of the company went immediately to work with a will, and it is to this spirit, aided by the indomitable will, perseverance, judgment and frugality of Philip Corbin, that the company's past and present success is mainly attributable, and those who know best its history will accord to him the honor that is justly due. They employ 350 persons, melt 5,000 pounds of new iron per day, 250,000 pounds of brass and 50,000 pounds of lead per year, manufacturing builders', cabinet, undertakers' and miscellaneous hardware : also, an extensive assortment of builders' locks, wrought and cast brass butts, plain and fancy iron butts, latches, coffin handles, &c., &c. Warehouse 55 Beekman street, New York.

North & Judd Manufacturing Co. About the year 1808, Hezekiah C. Whipple came to New Britain from Providence, R. I., and was employed by a jewelry company in this place, in making plain jewelry. Two or three years after that time he purchased a small shop on the corner opposite the North & Judd Manufacturing Company's present establishment, where he made a few silver plated harness buckles, cloak clasps, and silver plated wire, by hand, for the manufacture of hooks and rings for cloaks, &c. Very soon afterward Seth J. North and Alvin North formed a copartnership with Mr. Whipple, introducing horse power, and continued the business through the year 1812, until plated wire could be imported from England, when Alvin North having bought out the other partners, made some additions to the number of articles manufactured ; such as rings and trees for saddles, which were sold to saddlery hardware dealers, and which soon led to the manufacture of other articles in that line.

About the year 1822 Mr. North took into the business, Horace Butler, as a partner, and the firm commenced the manufacture of brass wire curb chains, harness rings, &c. This copartnership continued for about ten years, when Mr. Butler purchased Mr. North's interest in the business, and erected the buildings which he still occupies in the manufacture of the articles named. Mr. North very soon after commencing the manufacture of carriage knobs, and other small articles of cast brass.

After conducting the business alone for about 10 years, Mr. North associated his son, Oliver B. North, with him, and they commenced the manufacture of harness buckles of iron wire, soon extended the business to the manufacture of buckles cast from malleable iron, and many other articles of hardware used in the manufacture of harness and bridles, but about the year 1849 the younger North relinquished his interest in the business to his brother, Hubert F. North, who, with his father, continued it until May 17, 1855, when a copartnership was formed consisting of Hubert F. North, Lorin F. Judd and James A. Pickett, bearing the name of H. F. North & Co. In 1860 Mr. Pickett retired from the business, disposing of his interest to Mr. Judd, but in 1863 he returned, and a joint stock corporation was organized composed of the persons who had formed the copartnership last mentioned, under the name of North & Judd Manufacturing Company (which name is still retained,) with a capital of $60,000, since increased to $81,000. L. F. Judd, President, J. A. Pickett, Treasurer. They occupy a building 100x35 feet, 2 stories, built of wood with brick basement, used for manufacturing ; an office and packing room 60x25 feet, 2 stories. They employ 80 persons, consume 300 tons of wire per year. The motive power is furnished by a 35 horse power engine, built by the American Machine Works. They manufacture plated fine tinned and japanned saddlery, hardware, military and skate trimmings, castings, &c.

Landers, Frary & Clark, an incorporated company. Capital $500,000. G. M. Landers, President ; C. S. Landers, Secretary ; James D. Frary, Treasurer. This company is the successor of the Landers & Smith Manufacturing Company by whom the business was established. The main building called the "Etna" is 300x40, 3 stories, and where they manufacture table cutlery of all kinds. A wing to the building used as a forge shop is 280x40, 1 story, and another 100x40, 2 stories, engine, boiler and tempering room. The motive power is furnished by a two 125 horse power engines of Woodruff & Beach make, with 3 tubular boilers. They employ in all 600 persons, situated near the Etna building is another building 200x40, 3 stories, and an iron foundry 300x40, 1 story, and many other buildings attached for the successful prosecution of the business. A 125 horse power engine made by the Pacific Iron Works with 2 tubular boilers, supplies the power. Brass and iron articles are made here. Salesroom 53 Chambers street, New York.

NEWFIELD. A flag station 1 mile from Middletown, on the Middletown Branch.

NEW HAVEN, 76 miles from 27th street and 73½ from 42d street, New York ; 160 from Boston, 26 from Hartford, at the terminus of the New York & New Haven Railroad, New Haven, Hartford & Springfield Railroad, and Canal Railroad, and New London & New Haven Railroad. The Air Line, from Boston to New York, will soon pass through this city also. It is situated in latitude 41° 18′ 23″ north, longitude 72° 57′ 30″ west. New Haven has long been celebrated for its educational advantages. Yale College, originally founded at Killingworth, in the year 1700, chartered in 1701, removed to Saybrook in 1707, and to this city in 1716, received its name from Elihu Yale, its principal foreign donor, Governor of the East India Company. It has always sustained a high reputation, and now embraces 5 departments. Yale College has imparted instruction to a greater number of students than any other institution in the United States. New Haven was settled as an independent colony in 1638. In 1784 it was incorporated as a city. Population 1850, 20,341 ; in 1860, 39,267.

By the intelligent tourist, this place must be considered as one of the finest cities in America. New York is justly designated as the metropolis of the New World, Cincinnati as the Queen City of the West, Philadelphia as the Quaker City, Baltimore as the Monumental, and Boston as the Granite, while Chicago is recognized as the grain market of the world. But, for salubrity of atmosphere, fine parks, pleasant drives, bay and harbor scenery, imposing churches, seminaries, colleges and classical associations, eminent business and literary men, both in civil and military life, New Haven stands equal to any. While the country is distinguished for variety of climate, attractive mountain, lake and river scenery, fertile soil and the thrift and industry of its people, no one place of its size seems to combine so many features of interest and grandeur. It is central in its location, and easy of access from all parts of the country, either by land or water, on the line of both the direct inland routes between Boston and New York, and the northerly shore of a fine, broad bay that extends some four miles up from Long Island Sound, and affords a spacious and convenient harbor

for vessels drawing 16 feet of water. The transit accommodations are ample, six passenger trains arriving and leaving daily, carrying multitudes to their destination. And, in summer, thousands take the cool, delightful steamboats, on the sound, far from the noise and dust of the cars, and lose but little time. New Haven is, to-day, a city of over 45,000 inhabitants, remarkable, as New Englanders generally are, alike for their genius, industry, enterprise, careful thrift, their shrewd, practical cultivated sense and general wealth. Character seems to be stamped on everything. But its crowning glory is its institutions of learning.

Those who visit the city for the first time, must be favorably impressed with the private palatial residences of its public men. They seem to possess such and air of quiet comfort, space, rural and architectural elegance and horticultural adornment to which larger cities cannot aspire. A peculiar and pleasant grace and quiet everywhere prevail, although a great variety of business is carried on here, you are happily impressed with the grateful absence of noise and smoke and hurry. Every vehicle runs so quietly, every street is so clothed, shaded and adorned with majestic trees and every house wears such an air of comfort, such a tasteful and inviting home look, that you involuntarily think of scholars and books and the blessings of beautiful homes and happy lives. You feel that the bustle and confusion of other towns have in some way floated off when you enter the elegant streets of New Haven.

MANUFACTURES.

J. D. Burdick & Co. manufacturers of the National hay and straw cutter, commenced business in the year 1866, with a capital of $25,000. They employ about 30 hands, and occupy a brick building 100x40 ft., 4 stories high. Also, a forging shop, 45x40. The machinery is driven by a 20 horse engine, with tubular boilers. They manufacture about 500 cutters, valued at $10,000, per month; mean time consuming about 35,000 lbs. of castings, and 1,200 feet of lumber.

The senior partner of this firm, is the inventor of the Burdick National fodder cutter, which has been awarded the first prize at every fair at which it has been exhibited. The demand for them has been so great, that the firm, during the last five months have been obliged to run their works night and day to fill the orders received. The company have agents in all the prominent cities of the United States.

O. H. Morriss, No. 15 Brewery street, is engaged in the manufacture of light and heavy harnesses for the wholesale trade. The business was commenced 19 years ago, and has steadily increased. He now occupies a building 20x70 feet, two stories in height, and on the average employs 12 hands.

J. F. Goodrich. No. 30 East street, carriage manufacturer, commenced business in 1859. Since which time, his business has increased to such an extent that he now employs 60 journeymen, and occupies a large three story brick building, with two large wings.

Messrs. Beers & Hanover, carriage manufacturers, No. 35 Olive street, are successors to Hanover & Judson, who for thirty years were engaged in the same business. A visit to this establishment amply repays the pains it costs. For here you may see the process of carriage making in all its branches, from the rough state of the iron and wood, to the finest appointed carriages that is driven in Central Park. The finish of their complicated forgings are highly complimented in all parts of the manufactory are well appointed. Besides the making, they are extensively engaged in the repairing of nice carriages. So well have the present proprietors sustained the reputation of their predecessors that they now rank among the first manufacturers in their specialty. not alone from the extent of their business, but from the excellence of their work. At present they occupy two buildings, the main one is built of brick 50x90, two stories high, used as a salesroom; and the other used as a workshop 30x50, is a frame building. The firm make a specialty of light trotting wagons, and fancy turnouts.

John W. Nash & Co., 18 Howard street, manufacturers of the Universal Family Scales, also Shaler's Family Scales. These scales are made to stand upon the table or counter, and the article to be weighed is placed upon a platform or in a scoop upon the top, the correct weight being instantly and accurately indicated upon the dial. They are made of different sizes, to weigh from ½ oz. to 2 lbs., ½ oz. to 6 lbs., ½ oz. to 12 lbs., and 10 oz. to 25 lbs. 50 and 100 lbs. These scales are constructed in a manner that insures at once accuracy and durability. The great objection of the weakening of the spring which has always been made against spring balances and spring scales in general, is entirely done away, these springs being so arranged that any weakening which may in time occur, can be corrected by any sealer of weights more quickly than the bearings of any weight scale can be filed up, as balance scales frequently require. The Shaler scale was invented in 1865, by Reuben S. Shaler, and purchased by J. W. Nash & Co., who immediately commenced their manufacture. During the four years these scales have been manufactured tens of thousands have been made and sold in all parts of the United States and England, and the business greatly increased. The present capacity of the establishment is 1,000 scales per week, which employs 25 men in their construction. These scales being adapted for use in all departments in business where light weights are used, and being especial favorites in every family where in use, there must be an increasing and an unlimited demand. The improvements upon the Shaler patent which are used in constructing the Universal scale, must make it unusually popular. The office of the general agent, Alvah Bushnell, is in New York.

W. Rawson & Son, cutlery, Whalley av., are near Westville, commenced here in 1850. Their shop is 39x32 ft., 2 stories, which they took possession of in 1868. Their power is furnished by a 3 horse power hot air engine; employ 7 persons.

Harmon & Baldwin commenced the manufacture of Harmon's Elm City corsets, at 99 Church street, in 1866. They occupy 2 rooms, and employ 40 persons. The monthly production being 780 dozen. They use in their construction 400 yards of cloth and 25 lbs. of bone daily.

Osterweis & Oppenheimer, commenced the manufacture of cigars in 1862, at 107 Church street. Employ 16 persons, and turn out 600,000 cigars per year.

Henry Kelsey commenced the manufacture of harness trimmings in 1848, at 37 Orange street; employs 1 person, and does a business of $3,000 per year.

James Mount, 37 Orange street, commenced here the manufacture of saddles, in May, 1868. He employs 3 persons, and does a business of about $3,000 per year.

R. Mathews & Co., commenced the manufacture of boots and shoes, at 37 Orange street, in April, 1868, being successors to Mathews, Williams & Co. They employ 9 persons, and turn out 7 cases per week. Their manufactory is on the 4th floor, it being 30x60 feet.

Bowditch & Co. commenced the manufacture of furniture at 74 and 76 Orange street, as successors to Bowditch & Son in 1867, the business being established some 25 years since. The main building is 120x60, 3 stories, also a rear building 100x100, 6 stories. Employ 55 persons. The power is furnished by a 30 horse power engine built by M. & T. Sault. The branches are at Waterbury and Meriden.

Peck Bros. & Co. commenced the manufacture of brass cocks and plumbers brass ware generally at 39 and 41 Or-

BEERS & HANOVER,

35 Oliver Street, New Haven, Conn.,

CARRIAGE

MANUFACTURERS.

We make a Specialty of Light

TROTTING WAGONS,

— AND —

FANCY TURNOUTS.

M. ARMSTRONG & CO.,

Manufacturers and Dealers in

CARRIAGES

Of Every Description.

Nos. 3 to 9 Temple Street, - - New Haven, Connecticut.

ange street, in 1866, being successors of E. Peck & Son. The main building in the rear of their packing room and office is 60x80 feet, of which they occupy 2 floors. The building in front is 30x60 feet, with brass foundry attached 40x60. They consume 2,000 lbs. of metal per week and do a business of about $75,000 per year. A retail business in connection makes their business about $100,000. The company was incorporated with a capital of $35,000, since increased to $50,000.

R. & J. M. Blair commenced the manufacture of furniture at 73 Orange street, in 1856, being successors to their father, who established the business in 1808. The manufactory includes a building 50x30, 4 stories. They manufacture all styles of cabinet furniture. Employ 15 persons, and do a business of about $75,000 per year. This concern is the oldest in the city.

The New Haven Saw Works, 119 Railroad avenue. Manufacturers of all styles of saws, in a building 100x28, 3 stories, built of wood. Employ 20 persons, and do a business of $25,000 per year. The annual consumption of steel is $5,000 worth. The power is furnished by a 10 horse Wood & Mann steam engine. The proprietors are Bassett, Jarvis & Morris. The five principal clock manufacturers in the state use saws made by this company, also piano and melodeon manufacturers regard them as "just the saw." They are soon going to introduce a new continuous saw that has practical improvements, that manufacturers will appreciate. The office of the company is at 236 Chapel St.

The New Haven Paper Box Company commenced at 183 John street, in September, 1868. They manufacture all kinds of boxes, employing on an average 30 persons, occupy the fourth floor.

The National Fish Line and Cord Company was incorporated in 1865, with a capital of $12,000, H. J. Atwater, President and Secretary. The works are located at 322 Grand street; employ 5 persons in manufacturing seines, fish lines and twines. The room is 50x40, in 3d story.

P. B. Hire commenced the manufacture of pocket books in 1838, in this city. He now occupies the 2d story of a building 50x18, at Grand corner of Olive street, employs 8 persons and does a business of about $8,000 per annum.

E. Merwin & Son, shirt manufacturers, 337 Grand street. They commenced here in 1864, the business being established in 1859; employ 20 persons, turning out 15 doz. per week, using over 400 yards of cloth, and do a business of about $12,000 per annum.

The Bigelow Manufacturing Co. was incorporated in 1860, with a caital of $150,000. H. B. Bigelow, President and Treasurer; J. F. Bishop, Secretary. The business was established in 1824, by Cyprian Wilcox, this being the oldest foundry in the State. They have three main buildings, with others adjoining, covering about an acre of ground, located at 10 to 20 Whitney avenue, running through to 157 and 167 Temple street. They employ 160 persons, making Leffel's American turbine water wheel, steam engines, boilers, &c. They melt up 2,000 tons of iron, and do a business of about $500,000 per year. Their power is furnished by a Woodruff & Beach engine, 60 horse power, and 1 locomotive boiler.

Philo P. Bush, 42 Whitney avenue, commenced the manufacture of special machinery in 1855; the building is 30x50 feet, two stories; employ 16 persons. Mr. Bush has the reputation, and does make some of the nicest and intricate machinery in the United States. His power is furnished by a 20 horse power engine, made by M. & T. Sault. Persons wishing special machinery can be suited here.

M. Armstrong & Co., manufacturers of family carriages, 3 and 9 Temple street. Commenced in this city, in 1859; they occupy a main building 30x100 feet, 2 stories, with attic, as well as a building opposite, 30x100 feet, 2 stories with small building adjoining 20x40 feet, 1 story, with other small buildings attached. They employ 35 persons, turning out 150 carriages. The business amounting to $75,000 per year. Their carriages go all over the country, even to Australia.

Stiles Stevens commenced the manufacture of iron railings, fences, &c, at 13 Temple street, having commenced some 15 years previous in the jobbing business. Employs 5 persons; the power being furnished by a 5 horse power engine.

Benjamin, Peck & Kellam, commenced the manufacture of coffees and spices, in 1866, at 166 State street. The salesroom is 20x80 feet, 4 stories, the manufactory being immediately in the rear. They employ 10 persons, and use 3 coffee mills and one roaster. Roast about 25,000 lbs. of coffee and spice yearly.

J. Strouse & Co. were incorporated in 1865, with a capital of $20,000, I. Strouse, President. The manufactory is located on the west corner of Oak street. The main building is 62x30, 4 stories, built of brick with a 1 story tempering shop, boiler and engine room, &c., 30x80 feet. The business of the company is manufacturing corset steels and corsets; employ directly and indirectly, 250 persons, 50 being employed in the manufactory, finishing, &c. The daily production is 25 dozen corsets and 50 gross of corset steels. The power is furnished by a 15-horse power engine. This company are the largest manufacturers of corset steels in the country.

CLARK R. SHELTON commenced the manufacture of patent whip tips and ferules in November, 1868. He occupies the 4th floor of a building 36x44, at 214 Cougress avenue; employs 7 persons.

HENRY M. SMITH, AGENT, occupies a building 100x40, 3 stories, Crown corner of Park street, for the manufacture of saddles, collars and harnesses. Hands employed, 16.

C. COWLES & Co. commeneed the manufacture of coach trimmings in 1838. They are located at 47 and 49 Orange street, the main building being 200x25 feet, 5 stories. The company was incorporated under the firm name in 1858, with a capital of $100,000. J. N. Babcock, President; R. P. Cowles, Secretary; H. P. Dibble, Treasurer. Beside coach trimmings, they keep in all 140 persons making Norway bolts, coach lamps, stove ornaments, &c., &c., and do a business of $300,000 per annum.

THE NEW HAVEN MINERAL CO. was incorporated in 1864, with a capital of $300,000. Geo. J. Thayer, President; Geo. W. Campbell, Treasurer. They occupy a two story building 60x90 feet, on Long Wharf. The motive power is furnished by an 80 horse power Woodruff & Beach engine. They employ 75 persons, manufacturing sulphate of barytes.

THE MANSFIELD ELASTIC FROG CO. was incorporated in August, 1865, with a capital of $125,000. E. S. Quintard, President and Treasurer; J. P. Bronson, Secretary and General Manager. The works are located at 214 Congress avenue, the building being 36 x 40 feet, 4 stories, with wing 80 x 40 feet, 1 story, used for forging. This company keep 20 men employed making railroad frogs under Mansfield's patent. A 30 horse power engine, made by the Pacific Iron Works, drives the works.

W. & E. T. FITCH commenced the manufacture of carriage springs, malleable iron castings, &c., in 1848. The manufactory is located at Nos. 19 to 31 East street. The lot is 300x200 feet. They employ 100 persons. The motive power is furnished by a 150 horse power Woodruff & Beach engine, with 2 flue boilers. Their annual consumption of steel is 1200 tons.

THE NEW HAVEN GAS AND WATER PIPE CO., was incorporated in 1865, with a capital of $16,000. The office is 322 Grand street; the manufactory is State, corner Bishop, the building being 150x150, 1 story. They manufacture their own pipe and do work for corporations, &c. W. J. Atwater, President, T. W. Cahill, Secretary and Treasurer, Employ 15 persons.

REYNOLDS & COMPANY, 145 East street, manufacturers of machine bolts and coach screws, &c. The company was incorporated in 1867, with a capital of $25,000. The manufactory was formerly located on Temple street, and removed here in February, 1868. They employ 40 persons, the building being 30x70, 3 stories with building adjoining. The power is furnished by a 25 horse power Tyler engine. They use 125 tons of wrought iron yearly, and do a business of $50,000.

SAMUEL KERN commenced the manufacture of carriages in 1865 at 114 Franklin street; since removed to 240 Grand street, in April, 1868. He employs 35 persons, and turns out about 35 per month. The buildings are 300x40, three stories, with blacksmiths' shop attached.

SARGEANT & Co. Hardware manufactory is located on Wallace, Collis and Hamilton streets. The business was commenced in 1863, under the present management, it being established some 25 years. The manufactory embraces most of four blocks, the main one being 350 feet square, 5 stories in height. A new building was erected in the fall of 1868, 200x50, four stories, use for a store and packing room, with a bridge connected with the main works, containing a railroad, two stories. They employ 800 persons. The motive power is furnished by a 150 horse power engine with 2 flue and 3 tubular boilers. This company have the largest iron foundry for manufacturing small castings in the world, in which they employ 114 moulders. They melt 15 tons of iron daily, and more than a cask of copper and other metals in proportion.

THE AMERICAN CHEMICAL CO. was incorporated in 1866 with a capital of $185,000. George E. Blakeslee, President, Charles E. Graves, Treasurer, John W. Dwight, Secretary. The office is located at 221 Chapel street, the works at Fair Haven. Their main building is 125x36 feet, with 3 large wings, 2 stories, in which they manufacture bi carbonate sal soda and carbonate of soda. Another building 164x37 feet with wing, 2 stories, is used for the manufacture of sulphuric acid, sugar of lead and acetate of lime, building 160x36 feet, 1 story. The works have a steam saw mill adjoining a part of them. The capacity of these works is 1,400 tons of acid annually, the monthly production at present $20,000. They have 4 engines, used mostly for generating steam, 1 of them drives the saw mill, 50 horse power, 3 Woodward's steam pumps are used here, which give good satisfaction. They employ 50 persons. The bi carb. and sal soda is put up by an English method.

B. SHONINGER & Co., manufacturers of organs and melodeons. This company was incorporated in April, 1865, with a capital of $80,000. They are making mostly the patent Eureka organs, with the newly improved vox humana tremolo, also, superior melodeons of seventy different styles. A new style of melodeon is being made, called Aeolicord; being a melodeon and centre table combined, which makes it suitable for parlor, library, steamboat, saloons, &c. At the present time they employ 110 hands, and turn out 65 instruments of the various kinds per week. This number is unsufficient to meet the demands, and they are now increasing their works that they may be able to turn out 100 per week of the seven different kinds of instruments made. The present manufactory is a nice brick building, 5 stories high, 130x35 feet. The new addition is to be 115x40 feet, and built of brick.

AMERICAN FISH HOOK AND NEEDLE CO. Capital $300,000. President, C. O. Crosby; Treasurer, Charles Shelton; Secretary, Charles A. Crosby.

GRILLEY & Co. Incorporated August 1, 1866. This company manufacture patent capped gimlet pointed screws, pad screws, water or check hook bolts, sash and blind fasteners, brass and silver capped wrought iron, picture nails, porcelain picture knobs, with brass and silver capped screw, and base, silver capped wood picture knobs with silver capped screw and base, &c. This business was established in April, 1852, by Charles T. Grilley. They occupy about 10,000 square feet of flooring, and employ about 25 hands, The power is furnished by a steam engine of 15 horse power. The officers are J. M. Bishop, President; Joseph R. Brown, Secretary and Treasurer.

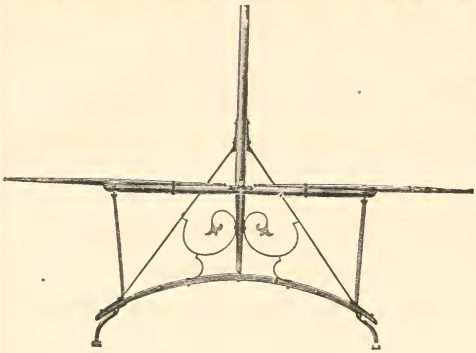
THE NEW HAVEN CAR CO. Incorporated in 1868, with a capital of $150,000,—$20,000 already having been paid in. This company's works are situated in the village of Newhallville, about a mile North of the centre of the city, on the New Haven & Northampton Railroad, for the manufacture of passenger, baggage and mail, also freight cars. They propose enlarging their works, making their main building, situated on the Railroad, 500 x 60 feet, 2 stories, this building to be used for cabinet, upholstery, painting and finishing. In an adjoining building 50 x 25 feet, 1 story, their blacksmith shop; also, where they will make their own trucks. The fires will be kept in blast by means of machinery, the power which drives it being hired of Mr. Geo. Newhall. They also hire of Mr. Newhall rooms in building fronting on Newhall street, for planing, sawing, &c. This com-

NORTON & COMPANY,

MANUFACTURERS AND OWNERS OF

PRUDEN'S PATENT, FOR

ADJUSTABLE CARRIAGE POLE;



One possessing all the advantages of a

STATIONARY POLE,

with none of its disadvantages, being equally strong, light and durable, and warranted

Not to work Loose or Rattle,

thereby obviating the objections to all other Adjustable Poles yet introduced into market. These Poles have given entire satisfaction to those who have used them. Try them and you will find these Poles a great convenience, as they can be adjusted in less than one minute, to fit any Carriage, Buggy, Wagon, or Sleigh, and will stay where adjusted, without any wear or rattling. They are made in every variety of style, from a heavy to a very light fancy trotting pole.

State, County & Town Rights,

for sale. Parties wishing to buy the right to manufacture this Pole, must address

NORTON & CO.,
NEW HAVEN, CONN.

Or apply to C. H. STILES, Travelling Agent.

CARRIAGES! CARRIAGES!

We also manufacture TOP and NO TOP BUGGIES, ROCKAWAYS, CABRIOLETS, EXTENSION TOP PILÆTONS, DOCTORS' and PARK PILÆTONS. We make PONY PILÆTONS a specialty.

NORTON & CO., successors to HUBBELL & NORTON, 15 Brewery St., New Haven, Conn.

pany employ 100 persons and will turn out 1 passenger car and 10 freight cars per week. Making mail cars only when ordered.

ASA MILLER & Co., manufacturers of light carriages, commenced business at Brattleboro', Vt., in 1827; removed in 1867 to this city. Their manufactory is situated at 127 Park street. Their main building being 62x32, three stories. On the first floor is their repository and office; painting, varnishing and trimming, being done in the second; they use third story for storage. Ell joining the main building, is where they have their wood work done; also painting, &c., being 75x24, two stories. Their blacksmiths' shop is in a building set apart from their other works, is 60x28, two stories. This firm employ 20 persons, and turn out on an average 150 carriages per year.

AMONG the manufacturers of carriages we would mention the long-established and popular firm of NORTON & Co. They are the successors of the well-known firm of Hubbell & Norton, who commenced the carriage business upwards of 30 years ago at the same place now occupied by Norton & Co. In their repository we saw some very fine poney phætons, which we noticed for their lightness, beauty of finish and thorough manner in which all parts were made. Also a number of very attractive carriages of other styles, which spoke well for the manufacturers. We were shown an improved style, which bids fair to come into general use for its adaptability and usefulness. It is called Pruden's Adjustable Carriage Pole. It possesses all the advantages of a stationary pole, and none of the disadvantages of any of the adjustable poles yet invented. It is readily adjusted to any size carriage or sleigh, and having sufficient strength, it is consequently durable, and at the same time light and practicable from its simplicity. Having been adjusted, it is clamped in place by a conical or tapering bolt, which prevents any rattling or looseness. They make them for every style of carriage or wagon.

SEABROOK & SMITH commenced business in 1868 as successors to Scott & Twitchell, for the manufacture of all kinds of light carriages, at 126 Park street. Their office is on the first floor of their main building, fronting on the street; also on this floor is their repository. This building is 25x60, 2 stories, using the second story for a trimming shop, &c. In a building adjoining, 25x35, 2 stories, is their blacksmith's shop in the basement, trimming and wood-work on the first floor, and painting, varnishing, &c., on the second. They employ 10 hands and make about 100 carriages per year.

C. BLACKMAN, successor of C. & E. Blackman, commenced business in 1868 at 118 Park street, for the manufacture of all kinds of carriages, in a building 90x85, 4 stories, including the basement, where he has 7 forges for ironing carriages; his office, repository and wood-work shop being on the first floor, and in the second story is the trimming room, also the painting of bodies, while the painting of running parts is done in the third story. Mr. Blackman employs 30 persons and makes about 350 carriages per year.

THE MATHUSHEK PIANO MANUF'G Co., situated on Park st. Nos. 106 to 112. This company was incorporated in 1866 with a capital of $50,000. The officers are, L. Feldmen, Pres.

NEW HAVEN HARDWARE COMPANY,

—MANUFACTURERS OF—

Builders' and Saddlery Hardware,

Patent Braces, Snow & Coe's Adjustable Clamps,

KITCHEN KNIVES & PLATED FRUIT KNIVES,

—ALSO, ALL KINDS OF—

Malleable Iron Castings,

Of Superior Quality, Made to order.

Factory and Warerooms, No. 20 Howard Street.

NEW HAVEN, CONN.

C. S. BUSHNELL,
JOHN McLAGON,
HIRAM STEVENS, } PROPRIETORS.

R. E. RICE, TREASURER.

S. Bretzfelter, Secretary. This company was organized for the manufacturing of Mathushek's patent colibri piano. They have a large building, being 104x50 feet, 4 stories, built of brick, with L 30x36 feet, 4 stories. Their motive power is derived from a 20 horse power engine, built by the Connecticut Iron Works, with locomotive boiler, built by the Bigelow Manufacturing Company. Their engine is on the first floor, where also are their heavy machinery, used in sawing, planing, and joining. On the second floor is their private office and counting room; also, where they make the tops and cabinet work. In the 3 story finishing and regulating; varnishing done in the fourth. The company employ 60 hands, and make 10 pianos per week. The company are not at present working to their full capacity, as they have sufficient room to accommodate 300 workmen.

The Messrs. M. BAUMGARTEN have been long known in Germany and throughout the continent of Europe, as men of most superior musical talent, and as building organs remarkable for their great and magnificent orchestral power and effects, combined with the more melodious or diapason qualities, which makes the organ superior to all other instruments with which to adorn our churches and accompany the human voice in praises to the Maker of all. And it is in this remarkable combination of the grand and solemn with the classic and beautiful, in one instrument, that their builders never have been excelled, and to this they owe their great success and patronage of the most appreciative in Europe, including the crowned heads of one or two of the leading nations.

For two or three generations they have been trained from boyhood to labor at mechanics and the study of all musical instruments, making the organ a specialty, and this in a country where the art of music is national, and compared with which, America is but in its infancy.

The fruits of their labor in Germany can be seen in more than one hundred organs, including five of the most remarkable, in Berlin, and others in Bahna, Brutzb, and scattered throughout Europe. (which, considering their mode of hand labor, is the work of a life-time.) First, on arriving in this country, their Superintendent built with his own hands, the largest and most remarkable barrel organ on this continent. Soon after this, the senior Baumgarten followed, and first assisted in erecting the famous Music Hall organ, in Boston, and now they have settled here to devote to the art in this country the remainder of their lives, and the result of their most valuable experience and years of profound study.

THE BAUMGARTEN CO. was organzied in 1868, as successors of the Baumgarten Organ Company, who organized in 1866, with a capital of $50,000, for the building of organs. Their manufactory is situated at 133 Park st., and is 40x80, three stories, with ell 20x30, two stories. On the first floor off of the street is the office; in the back part on this floor partitioned off, is the 15 horse power steam engine, built by the Bigelow Manufacturing Co., with locomotive boiler, which furnishes sufficient power to run their machinery. Their sawing, planing and jointing, is done in the basement. On the second floor is the woodwork and warerooms, and in the third story, their pipe making, fitting and finishing. The officers of the company, are Ira Merwin, President; Irad Fuller, Secretary and Agent; George S. Lester, Treasurer. Moritz Baumgarten, Superintendent.

THE NEW HAVEN HARDWARE CO. R. E. Rice, Treasurer, is located at 20 Howard street. The business having commenced in June, 1867, at which time, C. S. Bushnell, John McLagon, and Hiram Stevens associated themselves together, for the purpose of prosecuting the business under the above name. They manufacture saddlery, builders' hardware, patent braces, patent clamps, knives, etc., and all

kinds of malleable iron castings. The main building which they occupy is 100x50, 3 stories, with basement, the foundry is 100x50. The motive power is furnished by a new 80 horse power engine, built by M. & T. Sault, of this place, with 2 locomotive boilers. The grounds extend back 170 feet to the Canal railroad, and can be seen from the cars. This company employ 50 persons; use 100 tons pig iron, and do a business of about $100,000 per annum. Mr. Bushnell, one of the proprietors of this company, is one of the directors of the Union Pacific Railroad, to which he devotes much of his time and attention.

S. V. Ingham & Co., 20 Garden street, manufacturers of light rockaways, sulkies, skeleton wagons, and buggies, commenced business in 1860, as successors of Cooper & Ingham, who established the business in 1850. Their present factory is 95 x 25 feet, 3 stories. In the basement is the blacksmith's shop, used for ironing carriages. On the first floor, wood work shop, office and repository. Painting, varnishing and finishing done in the second story. The third story is used for store room. They employ 15 hands, and make a specialty in making sulkies and skeleton wagons.

Brockett & Tuttle, manufacturers of carriages, at Nos. 163 to 167 Goffe street. This firm commenced business in 1868, as successors of Brockett, Dorman & Tuttle, who commenced in 1864, successors to Atwater & King, who established the business about 1850. Their main building, 125x45 feet, 3 stories. On the first floor, is where they do their wood work. Painting running parts of wagons in 2d story. Painting bodies is all done in the third story. L to main building 95x40 feet, 2 stories. Blacksmith's shop on the first floor, and use the second story for storage.

Adjoining main building on Goffe street, is their repository building, 100x40 feet, 3 stories. Their trimming shop is in the second story, and the third is used for finishing carriages. This firm employ about 40 persons and manufacture on an average 400 buggies per year, principally light roadway wagons.

P. B. Hinsdale commenced the manufacture of light carriages, at 188 York street, in 1859. This manufactory is 60 x 60 feet, 2 stories. Wood work and trimming shop, also repository, being on the first floor. The second story, used for painting the carriages. In the rear of his main building is another workshop for wood work and painting, being 25 x50 feet, 2 stories, and employs 30 hands, and makes about 6 carriages per week.

Robert Sizer, manufacturer of light carriages, rear of 104 Howe street. Mr. Sizer commenced business in 1848, on York street, and removed to Howe street in 1852, and continued alone until 1856 when he formed a partnership with W. A. Doolittle. The partnership was dissolved in 1865. The factory building is 70x38, 3 stories. On the first floor is the blacksmith shop with 4 forges. The woodwork and trimming departments are on the second floor and painting, varnishing, &c., in the third story. Opposite from his factory is the repository building 50x28, 2 stories. Mr. Sizer employs 20 persons and manufactures about 50 carriages per year.

L. Mannville, Nos. 145 and 149 Goffe street, commenced business in 1866, for the manufacture of light top and open buggies. Main building, 80x40, 3 stories, with L 90x30, 1 story. On the first story is the office and repository, and on the second and third floors painting, blacksmiths' shop being in the L. In an adjoining building, 60x40, 3 stories, is where the bodies of carriages are formed, and on the second floor trimming and painting, and varnishing in the third, employing 25 persons, making on an average 300 carriages per year.

New Haven Chemical Works was incorporated in 1861, with a capital of $125,000. Office 231 Chapel street, works at East Haven. The largest building is 220x52, 2 stories, with 4 wings used for the manufacturing of saltpetre. The soda ash building 125x56 feet, 1 story with wing and additional buildings necessary for the prosecution of the business. They use 3 engines and 4 boilers for producing steam mostly, the largest engine being 25 horse. The annual production of these works is 1,200 tons of soda ash and 1,200 tons saltpetre. The officers are John W. Dwight, President; George E. Blakeslee, Treasurer; Charles E. Graves, Secretary.

F. B. Morse & Co. was incorporated in 1867, with a capital of $36,000 for the manufacture of carriage hardware. Henry Hooker, President; Charles T. Candee, Secretary and Treasurer. They occupy a room in the manufactory of R. A. Belden & Co. Employ 10 persons and do a business of $75,000 per annum.

B. I. Henry is the manufacturer of Henry's patent carriage springs and steel bridle bits. Employs three persons and occupies a room 50 x 25 feet, in second story of building 18 Howard street. The spring has been perfected so that he claims it to be superior to all others.

G. H. Snow & Coe commenced here the manufacture of small hardware in 1865. They occupy a room at 22 Howard street, 20x30 feet; employ 4 persons; use 1 planer, 2 lathes, 1 drop and 1 power press, and 1 die press. This company also manufacture patterns and models and special machinery. In the season of 1868, they made 2,000 gross of trimmings for Wilcox's fruit jars, with facilities for turning out 10,000.

Norva Douglass, trunk manufacturer, 118 Orange st., commenced business 1867, employs 2 persons, and makes 25 trunks per month. Shop 35x15 feet, 2 stories.

Henry Hooker & Co., carriage manufacturers. Incorporated 1868, as successors to Hooker, Candee & Co. Capital $200,000. This company's works are situated on State street, corner Grove street, and is one of the largest in the country, supplying 3 large repositories—one at New Orleans, one at Macon, Ga., and the other at St. Louis. Their building is 400 x 250 feet, 4 stories; employ 100 hands. They use a 40 horse power Putnam Machine Co.'s engine; flue boiler made by Bigelow. They turn out about 1,000 carriages per month.

The New Haven Manufacturing Co. was incorporated in 1852, with a capital of $32,000, since increased to $100,000. F. Skiuner, President; R. A. Brown, Secretary and Treasurer. They occupy a main building 150x50 used for a machine shop. The whole manufactory included 12 buildings covering 40,000 square feet, situated at the corner of Howard and Whitney Avenue. This company manufacture machinists' tools, and employ 100 persons using about 600 tons of iron and steel yearly, mostly iron. The motive power is furnished by a 60 horse power engine made by the Mattewan Machine Company, with 2 flue boilers. The business done amounts to $200,000 per annum.

McLagon & Stevens commenced here the manufacture of iron castings and general machinery in 1849. The main building is used as a foundry, being 40x96, 1 story. The machine shop is 35x50, 2 stories with necessary out buildings for pattern shops and office, which is located on Howard, corner of Whitney Avenue. Employ 55 persons and turn out about 4 tons of castings daily. The motive power is furnished by engine adjacent.

R. A. Belden & Co. commenced the manufacture of machinists' tools and special machinery at 208 Orange street, being successors to the Lindsay Fire Arms Company. The main building is 40x80, 2½ stories, built of brick, with blacksmiths' and pattern shop, 2 stories, adjoining. They em-

ploy 40 persons. The power is furnished by a 25-horse power engine with 1 cylinder boiler. The company is R. A. Belden & Charles T. Candee.

The Milton Soap Manufacturing Company was established in 1848, occupy 1 building 50x60, 3 stories, employing 5 persons and turning out 275 boxes per month.

R. M. Berwell manufactures soap, occupies a building 50x70, turning out 400 boxes per month.

Geo. W. Johnson & Co. occupy a building 30x30, 3 stories, for the manufacture of toilet and family soap; employ 4 persons.

Whitney Arms Company, incorporated in 1864, capital $76,000, E. Whitney, President and Treasurer, H. A. Church Secretary, for the manufacture of rifles, revolvers, and sporting guns. The manufactory is situated on Whitney avenue, 2 miles north of the depot, and consists of 6 large buildings and several small outside shops. The dimensions of the larger, are as follows: No. 1, 100x40 feet, 2 stories, built of brick, making mountings for guns; No. 2, 80x34 feet, 3 stories, wood, boring, rifling, &c.; No. 3, 45x30 feet, 2 stories, wood, stocking and milling; No. 4, 64x30 feet, 2 stories, wood, filling and bench work; No. 5, 60x40 feet, 1 story, wood, forging and tempering; No. 6, 64x32 feet, 3 stories, wood, assembling and finishing; using 3 turbine wheels, 2 of 100 and 1 of 200 horse power; also, have in case of necessity, a 100 horse power engine with locomotive boilers. This company, during the war, employed about 600 hands, and turned out about 3,000 arms per month, they now employ 125 hands, and turning out about 600 arms per month, principally sporting guns. Successors of Mr. E. G. Whitney, father of the President of this company, who established the manufactory of firearms about the year 1800; he having the first contract given by the United States Government, for the manufacture of arms. He also invented the cotton gin.

Opposite the Whitney Arms Co. is the Pump Works of the New Haven Water Company. Two large wheels, 30 feet diameter, 6 feet wide, 80 horse power each.

J. Matthewinan commenced business 1847, at 183 Orange street, manufacturer of powder flasks, shot belts and powder, 20x48, 2 stories with store house 16x22, 2 stories. Employs 10 hands; making about 1,500 shot belts, flasks, &c., per month. Eight horse engine, Kilburn maker, and a Boardman boiler.

Andrew Martin, match manufactory. Commenced business over 30 years ago. His factory is situated No. 29 Pearl street, and is 75x25, 2 stories, built of brick, brick flooring, &c. Building No. 2, 40x20, 2 stories, paper cutting, &c. Employ 22 hands and make about 100 gross matches per day. Mr. Martin uses Hewes & Phillips, Newark, N. J. pattern engine of 8 horse power, and Boardman boiler.

Jerome & Co. commenced business 1867, as successor to S. R. Jerome, who commenced business in 1856, for the manufacture of all kinds of clocks. This company make a specialty of manufacturing eight and one day pendulum and patent lever escapement brass clocks. They occupy a building 80x35, 4 stories, on the first floor is situated their 10 horse power upright engine and boiler, built by Woodruff & Beach, which runs their machinery. They employ 15 hands and turn out about 1,000 clocks per month.

The New Haven Buckle Co. Incorporated 1867, for the manufacture of clothing buckles of all kinds. Capital $26,000. The officers of the company are as follows: J. W. Bishop, President; Charles Atwater, Treasurer. They occupy a building 25x60 2 stories. On the first floor is their 10 horse power engine with flue boiler, built by Bigelow Manufacturing company, which runs their machinery, consisting of a planer, lathe, press and buckle machine. This company have facilities for turning out about 400 gross buckles per day. The factory is situated on Newhall street.

New Haven Folding Chair Co., 352 State street, incorporated 1864, capital $40,000. S. N. Dann, President, E. F. Mersick, Treasurer, manufacturers of folding chairs of all kinds; also carriage wood-work, occupying 2 buildings, 1st, 150x40, 3 stories; 2d, 60x35, 2 stories, employing 40 hands, turning out over 25,000 chairs per month. This company use Wilcox's (of Meriden, Conn.,) pattern engine, 3-horse power, flue boiler. The business was formerly carried on by Dann Brothers.

W. & C. Dickerman occupy a 4 story brick building. 120 x70 feet, as a carriage manufactory; employ 15 persons.

New Haven Wheel Co. works, No. 224 York street; incorporated 1853, officers, H. G. Lewis, President; E. E. Bradley, Secretary, manufacturers of wheels and wheel material; also Sarven's patent wheel. Land occupied for works, including buildings and yard, 326 feet front, from 125 to 150 feet deep.

George T. Newhall commenced business in 1848, for the manufacture of carriages and everything pertaining to carriages, such as spokes, hubs, bolts, nuts, &c., &c. His manufactory is situated on Newhall street, about a mile north of the centre of the city, on a tract of land which, 14 years ago, was a corn patch and cow pasture, but which is now laid out in broad streets, and contains neat dwelling houses, extensive factories, churches and school houses.

Mr. Newhall was the first man who applied machinery propelled by steam power to the manufacture of carriages in New Haven. He now stands among the first of carriage manufacturers in the State.

His main building is 235x35 feet, 3 stories. This is filled with machinery, to which power is applied by means of a main shaft running the entire length of the building. On the first floor is the engine room, containing a 65 horse power engine, built by the Pacific Iron Co., and tubular boiler, built by Pitkin Bros., of Hartford. Also, the heavy machinery for cutting up timber and giving it form and shape.

Here all parts of the bodies are sawed, dressed and framed, leaving only the putting together for hand labor. 3 machines are used for turning spokes, others for turning and mortising hubs. On the same floor are found the necessary machinery for making all kinds of bolts and in the construction of carriages and cars.

In an adjoining building, disconnected from the larger factory, are 14 blacksmith's forges. Here, as in all the other departments, there is a systematic division of labor, and in ironing a carriage it passes through 5 or 6 different hands before it is completed. The fires are all kept in full blast by the steam engine. In this building there is a trip hammer and furnaces for the manufacture of springs and axles. Another building 150x45 feet, 4 stories, fronting on Newhall street. On the first floor is the private office and counting room, with 2 rooms of large size, which were formerly devoted to building horse cars, which was an entirely new branch of business in New Haven, having never been attempted by any one. The second floor is divided into different appartments for trimming purposes, coloring and varnishing.

On the third floor, there is a large room for cutting out and preparing trimmings; and above, in the fourth story, is a room extending the entire length of the building, used wholly for painting the running parts of carriages. Before the war, Mr. N. employed about 176 hands, and his annual production was about 2,000 carriages. He now employs about 60 hands and turns out about 20 per week.

OSBORN & ADRIANCE, 132 and 134 Park street, commenced business in 1855 as successors of Hooker & Osborn, who established the business of coach and carriage manufacturing in 1839. Their main building is 100x25, 3 stories, with wing 75x25 and L 30x60, 3 stories. On the first floor of their main building is their repository and office; the two other floors are used for painting and trimming. Their blacksmith's shop is in the L part, and contains 10 forges for ironing carriages. This company employs 50 persons and manufacture on an average 130 carriages per year.

AMONG the many manufacturers of light carriages in the city of New Haven, we find C. F. DIBBLE, at 135 Park street, who commenced the manufacture of all kinds of top and open buggies in 1866, after serving his country three years in putting down the rebellion. His main building is 114x27, 3 stories. On the first floor is his office and repository, and on the second and third painting, trimming and finishing. In the blacksmith's shop, which is 50x22, 1 story, he has 4 forges, used in ironing carriages, giving employment to 22 persons.

STEPHEN M. WIER commenced business in 1866, as successor of Miner & Wier, who commenced the manufacture of light carriages, in 1824. Mr. Wier's manufactory is situated between 260 Elm and 59 Martin streets, in the western part of the city. His main building is 200x30, three stories, using the basement for heavy machinery for sawing up timber, &c. Here, also, we find a 15 horse power Kilburn engine, and Boardman boiler, which furnishes sufficient power to drive such machinery as would be found in a shop of this kind. On the first floor is the private office and counting room, also the body and finishing shop. The second story is the trimming and painting body shop, and on the third floor are several rooms for painting the running parts. His blacksmith's shop is detached from the main building, but connected on the side by a passage way leading from the second story, being 175x28, one story, and containing nine forges, all kept in blast from the engine.

Mr. Wier's repository is situated opposite, at No. 257 Elm street, being 145x40, one story. He employs 50 hands, and makes about 800 carriages per year.

AMERICAN FISH HOOK & NEEDLE CO., commenced business in 1865. The power is furnished by a 40 horse power engine, built by Hughes & Phillips, Providence, R. I. The manufactory is located near the New York & New Haven Railroad Depot.

DURHAM, BOOTH & WOOSTER, manufacturers of fine carriages, commenced business in 1854; employ 50 hands, and occupy a 5 story brick building 60x100 feet.

WESTVILLE, a village adjoining the western boundry of New Haven, located on the West river. About 1,500 inhabitants. Horse cars leave here every 24 minutes for the city. A Post Office is here, also 3 churches.

A. BEECHER & SONS, manufacturers of friction matches, match splints and match machinery. Commenced here in 1855. The manufactory is located on West river. The main building being 144x30, 2 stories with wing 30x20, 2 stories, also a brick building 30x50, 2 stories with wing 65x30, 3 stories. The motive power is furnished by a Leffel turbine 20 inch water wheel and 2 Van de Water turbines 50 and 37 inch respectively, the fall being 9 feet. They employ 65 persons and the daily production being 200 gross of matches and 1,000 gross of match splints. The business amounting to $300,000 per annum. The salesroom is at 141 Maiden Lane, New York.

In connection is the Beecher Basket Company, which was incorporated in 1868, with a capital of $30,000. Anson Beecher, President; L. W. Beecher Treasurer; H. A. Barnes, Secretary. They occupy rooms in A. Beecher & Sons, manufactory. Employ 46 persons and do a business of $50,000 per year. Their specialty is making baskets for transporting berries, fruit, &c., &c.

BLAKE BROTHERS commenced business in 1836, for the manufacture of hardware for carriage builders and cabinet makers' use; also, patentees and manufacturers of the famous stone breaker, for crushing stones, ores, emery, and all hard and brittle substances. Their works are situated on Blake street, and consists of a foundry, 150x30 feet, wing 50x30 feet, 1 story, using about a ton of iron per day; machine shop 150x30 feet, 2 stories; building in the rear, 100x35 feet, 2 stories, used for office, packing room and store room. Their japanning being done in a building 50x20 feet, 1 story. They derive their motive power from a 30 horse power steam engine, with tubular boiler, built by Matteawan Company, New York; also, a 15 horse power Leffel wheel, 3 feet in diameter with 8 feet fall. This firm employ about 60 persons, and do a business of about $15,000 per month.

A. B. MALLORY, manufacturer of hardware and manilla paper, commenced business in 1848. His mill is situated on Mechanics street, about a quarter of a mile west of centre of village. His mill building is 75x302 feet, 2 stories, containing, on the first floor, 3 engines of 250 lbs. each, for washing and grinding stock; also, office and stock room, using the second story for storage; machine room is in a building 20x60 feet, 1 story, adjoining main building on the west side; using 2 turbine wheels of 14 horse power each to run the machinery, wheels being 30 inch in diameter with 9 feet fall. Mr. Mallory employs 10 hands; about 8,000 lbs. stock per month, and makes about 1,800 lbs. paper per day.

THOMAS GORMAN commenced the manufacture of matches in 1853, in a building situated near the centre of the village, being 76x40 feet, 2 stories; hiring power of Hotchkiss & Parker, who run a saw mill on the first story in front. Mr. Gorman employs about 25 persons, and makes about 120 gross of matches per day.

EDWARD HARRISON commenced the manufacture of portable burr stone flour and grain mills, about 30 years ago near New Haven. In 1863 he built a manufactory in this village, being 3 stories in height 50x40. The works are driven by 3 turbine water wheels, Boyden & Tyler makers, the manufactory being located on a stream leading from Beaver Pond. A new feature of this establishment is a more modern improvement than others, invented by Mr. H., is a griuding and bolting mill, applicable to all new and old styles of mills in use. The flour comes out at one spout the bran at another. This machine has been patented in different parts of the world, and it obviates the necessity of expensive and cumbersome bolting machines. The annual production of this manufactory is about $20,000.

WOODWORTH & SINCLAIR commenced the manufacture of hot pressed nuts in 1866. Occupy a part of 3 buildings, and employ 7 persons.

"WEST ROCK PAPER MILL." F. S. & J. Parker, proprietors. Established 1840. Mill situated in Westville, and employ 30 hands. Three engines of 600 pounds each, manufacturing book paper, and treasury blotting paper; power, 100 horse overshot wheel, 30 feet diameter, 8 feet buckets; also, 100 horse engine built by Matteawan Company, with 4 flue boilers built by same company, 14 feet long, 5 feet diameter; also, have 2 engines for running machines for making paper.

NEWINGTON, 5 miles from Hartford, 27¼ from Waterbury. A country station on the Providence, Hartford & Fishkill Railroad and New Haven, Hartford & Springfield Railroad.

NEW LONDON, New London County, 50 miles from New Haven, 62 from Providence, 126 from New York, 106 from Boston, on the New Haven, New London and Stonington Railroad, and the terminus of the New London & Northern Railroad. This city was settled in 1641 or 1645, by John Winthrop, son of Governor Winthrop, of Massachusetts, and was incorporated in 1784. Its early name was Pequot, after a powerful tribe of Indians that originally held this territory. Sausacus, a great Sachem of this tribe, had a seat here. The Pequot House, about three miles south of the city, near the mouth of the harbor is one of the finest watering places in New England.

New London is situated on the Thames river, three miles from Long Island Sound. Its harbor is one of the best in the United States, being large, safe and commodious, and having five fathoms of water. It is three miles long, and rarely obstructed with ice. From its excellent maritime location, commerce and the fisheries have been the principal pursuits of the inhabitants. Their fine harbor has served in a great degree as the port of Connecticut river, the impediments in which frequently prevent its being navigable for large vessels fully laden.

The city is principally built on a declivity, which descends to the east and south. On the summit of the high ground, back of the most populous part of the city, the observer has a fine prospect of the surrounding country. The place is defended by two forts,—Fort Trumbull and Fort Griswold. Fort Trumbull stands on the New London side of the Thames, about a mile below the city. It is situated on the rocky extremity of a peninsular extending eastward into the river. This fort is a station for United States soldiers. Fort Griswold is on the east side of the Thames, on a commanding eminence opposite the city, in the town of Groton.

New London has been rendered conspicuous for its sufferings during the Revolutionary war, and the theatre of hostile operations.

A daily line of steamers runs between this city and New York, connecting with trains for Norwich, Worcester and Boston, called the New London Line.

New London has a population of 12,000. Valuation of real estate, $3,000,000; personal estate, $2,500,000. Two Congregational churches, 3 Baptist, 1 Methodist, 1 Episcopal, 2 Catholic, 1 Universalist, and 1 Seamen's Bethel. 5 National banks, with joint capital of $700,000; 2 savings banks. The New London Savings Bank has $2,000,000 of deposits. Rate of taxation, 12 mills.

NEW LONDON STEAM WOOLEN MILLS CO. This company occupy one brick building 140x60, has 28 looms. The power is furnished by a Cranston & Bates 75-horse power steam engine with 1 tubular boiler; it is a 5 set mill and manufactures nothing but woolen goods; employees averaging 65.

NEW LONDON HORSE NAIL CO., established and incorporated in 1859, with a capital of $50,000. They occupy a brick building 200x40. The power is furnished by 1 Albertson & Douglass 50 horse steam engine, with 1 locomotive boiler. They employ about 110 hands and do a very large business, manufacturing only horse nails.

W. W. TOBEY, shirt manufacturer, occupies a building 58x60, has 1 of Hobbs & Co.'s 7-horse steam engines and with 40 employees manufactures cotton shirts in great quantities.

WILSON MANUFACTURING CO. This company was established in 1827, and incorporated in 1855. They now occupy 15 brick buildings, in the north-western portion of the city, the main one is 160x50; the power is furnished by 1. Cranston & Bates 100 horse steam engine, with 1 flue boiler; they employ 125 hands, and manufacture coffee mills, braces jack screws, turning lathes, clamp heads, screws, &c. &c., also, malleable iron castings, and in connection with the above they have a brass and iron foundry; also, a galvanizing shop.

ALBERTSON & DOUGLASS MACHINE CO. This company commenced business in 1836, with a capital of $100,000. They now occupy 1 main brick building 50x190, 2 stories, and 8 smaller ones, some of which are, viz.: 1 boiler building, 50x115; 1 foundry, 50x80; 1 blacksmith's shop 50x 75. The power is obtained from 1 Cranston & Bates 40 horse steam engines, with 1 locomotive boiler. They employ a large number of hands, and manufacture marine engines, stationary, and portable steam engines, circular saws, boilers, cotton gins, &c.

NEW MILFORD, 35 miles from Bridgeport and 94 from New York, a station and town on the Housatonic Railroad, in Litchfield County. This township is hilly and broken, several mountainous ridges extending through it. The soil is much diversified, and where susceptible of cultivation, it is generally good, but more distinguished for grain than grass; there are, however, many excellent meadows, but the pasturage is not abundant. The town was first settled in 1707. The first bridge ever built over the Housatonic was built in this town in 1737. The village of New Milford is decidedly handsome, the streets are wide and well shaded, producing an inviting and pleasing scene. There are 2 banks there and an estimated population of 4,000.

H. E. BOSTWICK commenced the manufacture of vegetable buttons in Springfield, Mass., and in 1866, in the fall of 1868 removed to New Milford where he now carries on the business. His factory is situated just above the depot, and is 30x70, 3 stories, employing 75 hands. Mr. B. derives his motive power from a 20-horse steam engine with tubular boiler, made by Woodruff & Beach.

H. B. & G. H. NOBLES, manufacturers of gents' fine calf boots, commenced business in 1848. Factory situated next to the New England House, and is 32x20, 2 stories, employing 25 hands, turning out about 30 pairs of boots per day.

MESSRS. SMITH & RANDALL commenced the manufacture of wool hats in 1862. The business was established by Smith, Erwin & Randall in 1833; factory situated below the depot and is 100x25, 2 stories, giving employment to 20 hands and making on an average 200 dozen hats per week. Power derived from a 12-horse steam engine, with cylinder boiler.

THE MARYLAND IRON WORKS, J. A. Northrop, proprietor. These works are situated near the depot, and consists of foundry and machine shop, the machinery of which is driven by a 20 feet overshot wheel, the fall being 40 feet. Employ from 5 to 10 hands.

SMITH & BURNHAM. Business established in 1840. Manufacture seine twines, warps, &c. Employ 20 hands; consume 80,000 lbs. stock per annum, and do a business of about $35,000. Occupy 2½ and one 2 story building 36x x72 and 22x28 feet respectively. Run 1,000 spindles, with twisters, &c., to compare. Manufactory located 7 miles from New Milford depot, on Housatonic Railroad, on one of the best and most reliable streams in the country.

NEWTOWN, 19 miles from Bridgeport and 91 from Pittsfield, on the Housatonic Railroad. A village in a town by the same name, located one-half mile from the depot, on a hill overlooking the surrounding country. It contains 2 churches and 1 national bank. The Indian name of the town is Patatuck. The surface of

the town is hilly, many of the eminences are extensive and continuous. The soil is principally a gravelly loam, generally fertile and productive.

NOANK, 131 miles from New York and 101 from Boston. A quiet country station, on the New London, Stonington and Providence Railroad. The Nauyang House on Mystic Island, is situated directly opposite this station.

NORTH GROSVENORDALE, 20½ miles from Worcester and 39½ from Norwich, on the Norwich and Worcester Railroad. A small factory village containing one church. The only manufactory here is that of the Grosvenordale Company. William Grosvenor, Wm. Grosvenor, Jr. and Lucius Briggs, proprietors. The mill is 100x50, 4 stories, built of stone with a one story wing attached for office and machine shop 35x25, built of brick. The mill has 3,500 spindles, 120 looms; consumes 9 bales of cotton per week and produces 2,500 yards of jaconets, using No. 48 yarn. A Fall River turbine wheel furnishes the power, the fall here is 22 feet, located on French river. Employ 75 persons. Thomas Wilbur, Superintendent.

This company also occupy 2 mills at GROSVENORDALE, 21 miles from Worcester and 38½ from Norwich, on the Norwich and Worcester Railroad, containing one church.

THE mills are located ½th of a mile from each other and are known as the NORTH AND SOUTH MILLS. The north mill is about 140x45, 4 stories with wing 80x45, 4 stories. The south or new mill is 160x58, 5 stories with 2 wings 75 x40, 4 stories, and 40x30, 2 stories. The whole establishment is built of brick and adds much to the appearance of the village. Jaconets are made here. Employing in both mills 300 persons. Run 31,000 spindles, 556 looms; consume 50 bales of cotton per week and produce 28,000 yards of heavy sheetings and 68,000 yards of jaconets. Two Jonval and one Leffel wheel supply the power. The fall is 11 and 12 feet. L. Briggs, Superintendent.

NORTH HAVEN, situated on the New Haven, Hartford and Springfield Railroad, 7 miles from New Haven, and has a population of about 1,500. The principal business carried on is the manufacture of bricks.

ALFRED IVES & SON, situated on the New Haven, Hartford and Springfield Railroad, 2 miles south of North Haven depot, in the town of Hampden. Mr. Ives commenced the business of making brick in 1853; his yard covers 4 acres of ground. He employs 16 persons, and makes about 2,000,000 bricks per year.

H. P. SHARES & Co. This company commenced in 1868, one mile below Messrs. Ives & Son, manufacturers of brick. Their yards cover 8 acres of ground; make about 2,500,000 bricks per year; employing 12 hands.

SMITH BROS., manufacturers of shafts, poles, carriage parts, &c. &c. Business established in 1855. They occupy buildings 30x50 feet, two stories brick, with an addition. Employ 10 hands, and do a business of $10,000 per year. Their power is furnished from a 16 ft. overshot wheel.

NORWALK, 31½ miles from New Haven, 45 miles from New York, 143½ from Providence and 191 from Boston, on the New York and New Haven Railroad, and the southern terminus of the Danbury & Norwalk Railroad; one of the most flourishing towns in the State. It originally included part of the present town of New Canaan and Wilton, and part of Westport. In the ancient record the bounds are stated to be "from Norwalk River to Sauhatuck River, from sea, Indian one day's walk into the country." The name of Norwalk is derived from the above bargain viz.: The northern bounds of the lands purchased were to extend from the sea one day's "north walk" into the country.

The soil in this town is excellent. The surface is uneven, being pleasantly diversified with hills and valleys. On the border of the Sound the hills are generally moderate, and in the interior more elevated. The valley which lies along the Norwalk River, and in which the town is built, is beautiful. Few richer prospects of the same extent can be found than that which is presented from the neighboring eminences of this ground; the town built in its bosom, with its cheerful spires, the river flowing through the middle; the farms on the bordering hill; the rich plain that skirts the Sound, and a train of islands fronting the mouth of the river and extending eastward five or six miles, together with an unlimited view of the Sound and the Long Island shore. The village around the station is called South Norwalk. Norwalk village is about one mile and half north of the station. Just east of the station is the draw-bridge, which was the scene of a terrible accident a few years ago. Since that time a law has been passed, requiring all trains to come to a full stop before crossing a draw-bridge. This town was burnt by the British under Tryon, on the 17th of July, 1779. A horse railroad 1½ miles in length connects South Norwalk with Norwalk every 15 minutes. A daily line of steamers runs from this place to New York, also two lines of packets, the latter going up to the upper village before discharging their cargoes. There are two hotels at the upper village, Norwalk and Connecticut; at South Norwalk 2, Barnum's Old Well Hotel and Lucas' Hotel. In the fall of 1868, a clam bake was held under the auspices of Mr. Barnum, proprietor of Old Well Hotel, to which all the fat men of Fairfield county weighing 200 pounds and over, were invited. The festival was a great success, and details of it were given in all the daily papers of the largest cities in the Union both west and south. Norwalk and South Norwalk has 3 national and 2 savings banks 1 insurance company, 9 churches, and an estimated population of 9,000.

THE NORWALK LOCK CO. was incorporated in 1856, with a capital of $50,000, since increased to about $300,000. E. Hill, President; B. F. Libby, Agt. Office, 33 Beekman st., New York. E. Beard, Secretary and Treasurer; H. H. Elwell, Superintendent. The works are located at the junction of the Norwalk & Danbury Railroad and New York & New Haven Railroad, South Norwalk, and can be seen distinctly from the cars. The works comprise 7 buildings, built in the form of 2 hollow squares, the whole being 280x140 feet, the main building 3 stories, the remainder 2 stories. This company employ 250 men. A 150 horse power engine, built by the Meriden Machine Co., drives the works. The business of the company is the manufacture of door locks, knobs and builders' hardware; melting about 3 tons of iron daily. The nucleus of this company was commenced in Springfield, in 1846, when a company was formed for the manufacture of the patent Union bolt knob lock, Mr. Elwell, the present Superintendent, being connected with the enterprise, and the only person that has continued from the commencement down to the present time. The business has been under the different firm names of Morgan & Kingsley; Curtis, Morgan & Co., and The Meriden Lock Co., the latter company being started in 1850, and the immediate predecessors to the Norwalk Lock Co. Mr. Libby, the Agent in New York, was formerly of the firm of Colton & Libby, and joined the Meriden Lock Co. in 1854. The daily production of the company, under the superintendence of Mr. Elwell, when it com-

menced in 1846, was 2 dozen per day; the works at present turn out 300 different sizes and varieties, the daily production being 3,000 locks.

THE UNION KNOB WORKS is directly opposite the manufactory of the Norwalk Lock Company, South Norwalk, who are joint owners in connection with the Russell & Erwin Manufacturing Company, of N. Britain. The main building is 230x30 ft., 2 stories, with other buildings, 100x56 feet, 2 stories, and 43x45 feet, 2 stories respectively. This company employ 40 persons, and produce 1,500,000 knob tops annually, which are mounted by the proprietors. The knobs are made of 3 different kinds of clay obtained from New Jersey.

LOUNSBURY BROTHERS, commenced the manufacture of boots and shoes for ladies' and misses', in June, 1868, having removed here from Binghampton, New York. They occupy a part of the first and all of the second floor 100x60 feet, in Sherwood's block, Main street. Employ 75 persons, and produce 3,600 pairs per month. Their store is at 249 Chapel street, New Haven, the brothers names are William, Phineas C. and George E. They do a business of $100,000 annually.

MORRISON, SON & HUTCHINSON, occupy 2 buildings 90x90 feet, 4 stories, and 50x100 feet, 3 stories respectively, for the manufacture of shirts. The business was established in 1845. The sewing machines used here are run by steam power, by a 20 horse power engine. The salesroom is 327 Broadway, New York.

THE NORWALK IRON WORKS was incorporated in 1867, with a capital of $300,000. E. Hill, President; E. J. Hill, Secretary and Treasurer; O. T. Earle, Superintendent. This concern was formerly Geo. Dwight, Jr. & Co., Springfield, Mass., the present company purchasing, and removed to South Norwalk in 1867. Their main building is 250x50 ft. three stories, built of brick, and used for a machine shop. The foundry adjoining is 60x100, one story. They employ 100 persons, manufacturing machinery, steam engines, and as a specialty, Earle's steam pump; also, blowing engines. The motive power is furnished by a 36 horse power engine, with 2 flue boilers, made by this company. They have made over 2,000 of their steam pumps. Melt 2 tons of iron daily. The works can be seen from the cars near the ill-fated "Norwalk draw."

ADAMS BROTHERS & BRUSH, manufacturers of hats, occupy a building 70x26, three stories, with wing 24x84, two stories, besides other buildings necessary for the prosecution of the business; located directly opposite the depot, at South Norwalk. This firm were successors to Adams & Holmes, in January, 1868, the business being established some eight years since. They employ 150 persons during the busy seasons; 50 females, and 100 males, and turn out about 400 cases of hats per week, doing a business of about $300,000 per annum.

CROFUT, KNAPP & Co. commenced the manufacture of fur hats about 1858. They employ 150 persons; the manufactory covering about half an acre of ground on the corner of West avenue and Union streets, South Norwalk. Their weekly production is about 325 dozen per week. Salesroom 37 Mercer street, New York.

ISAAC CHURCH, JR., commenced the manufacture of machinery in 1863, at the upper village or Norwalk proper. The building he occupies is 48x24 feet, 2 stories. The motive power is furnished by a 12 horse power engine, with 1 upright tubular boiler. Employs 8 men and does a business of about $20,000 per year. A specialty of Mr. C. is the manufacture of his patent steam pump, which he claims possesses superior advantages over all others.

A. SOLMANS commenced the manufacture of hats in 1864, at S. Norwalk. He employed 60 hands, and turned out 24 dozens of hats per day. On the eve of October 29th, his manufactory was burned. In all probability, a new one will be built.

JAMES H. PRENTICE commenced here the manufacture of hat forms in 1856, being a branch of his main establishment in Brooklyn, New York. Employs 30 persons, and makes 2,000 hats forms daily. The building is situated near the railroad, at South Norwalk, and is 40 x 75 feet, 3 stories. The power is furnished by a 40 horse power engine, built at Springfield, with 4 boilers.

GEO. H. RICE, South Norwalk, commenced here in 1866 the manufacture of plain and fancy black walnut furnishing goods, cases, &c. Employs 7 persons, the building being 22x50 feet, in which he occupies 1 room.

NORTON & GREEN occupy a part of building recently erected on the corner of Water and Raymond streets, South Norwalk, for the manufacture of machinery. They commenced business in 1868, and employ 6 persons.

H. Z. NORTON commenced the manufacture of wire ferrules about 1860. The manufactory is located in a new building erected by him, at South Norwalk. Employs 8 persons, and 3 persons in brsss foundry.

THE SOUTH NORWALK PLANING MILL CO. was incorporated about the year 1665, with a capital of $25,000. D. R. Austin, President; R. I. Tolles, Secretary and Treasurer. Their building is 125x45 feet, 2 stories. They manufacture doors, sash and blinds; employ 34 persons, and do a business of 50,000 per year. This company propose soon to enlarge their works and business, with more facilities, to meet the demand for their productions. Use 1,000,000 feet of lumber annually.

THE NORWALK POTTERY, A. E. Smiths' Sons, proprietors, is located at the foot of Mill Hill in the centre of the upper village. The business was established nearly a century ago. A. E. Smith their father, commenced here some 48 years since as successor to Absalom Day. In 1849 the present firm was formed, consisting of Theodore E. Asa, Elbert W. and Howard H. Smith. The buildings have been added to and built on from time to time, originally having only one kiln. The main building is 108x45, 3 stories with extension 75x40, 2 stories, also two wings 60x33, each 2 stories, besides office, storehouses, sheds, &c. This company employ 60 persons manufacturing stone, brown, chemical and earthern ware, running 4 kilns. The works are located on the dock and in direct communication with their warehouse, 28 Peck slip, New York. A vessel is run by them, fetching their clay from New Jersey, and freighting their goods. A horse power engines runs the works.

W. N. BENEDICT, manufactures fine cassimeres and soft hats and is the only manufacturer of these kinds of goods in this country. The business was established in the year 1848, by this same company. They occupy a wooden building 2½ stories high and 75x24 feet. The average number of employees is about 20. The goods are not finished here, but are sent to New York hatters, and finished by them. This company use only the nicest kind of fur in the manufacture of this style of hats, of which they make 43,000 to 45,000 per year.

UNION MANUFACTURING CO. were incorporated in 1837, with a capital of $100,000. The business was established in 1827, by G. G. Bishop. The main building is 207x40 feet, with an addition 207x25 feet, and an ell 50x80 feet. The main building is built of wood and is 4 stories high. The store house is 40x80 feet, built of brick and is also 4 stories in height. There is 100,000 lbs. of wool used monthly. They employ 175 hands. The motive power is derived from two engines of 100 horse power, driven by 3

boilers of 75 horse power each. The engines and boilers were made by Woodruff & Beach, Hartford. They have one overshot wheel 16x20 feet. There is felt for various purposes manufactured here. The total amount of goods for shirts alone being 8,000 yards per month.

ALEXANDER AUSTIN, manufacturer of stoves and other foundry articles; also of agricultural implements and of E. R. Austin's patent Atlantic water elevator. The business was established by the present owner in 1849. The size of buildings are as follows: The foundry is 40x90 feet, one story high and built of brick. Warehouse is 30x40 feet, 2 stories in height and is constructed of stone. The employees number from 15 to 20. The works are run by steam power.

NORWICH is a beautiful city of about 20,000 population, and situated at the junction of Shetucket and Yantic rivers, both of which furnishes extensive water power. The place contains, to a certain extent, several villages. The city proper, which was incorporated a city by the General Assembly in the year 1784, was formerly called Chelsea, and consists of the towns of Norwich, Westville, Norwich Falls, on the Yantic river, and Greenville, east of the city, on the Shetucket river. The city is built on a steep acclivity thereby making the streets rise as in terraces and giving the houses in the rear an excellent view over those in front, making the general appearance of the city very attractive. The Falls, 1 mile from here, have, to the stranger, a wildness and beauty seldom seen, there being rocks at the front of the falls which are exposed at low water, and in which there are circular holes, often 6 feet deep, worn with all the regularity of a work of art, by stones whirled around within them by the force of water. From a high projecting rock which overhangs the front of these falls, the Narragansett Indians formerly plunged to destruction rather than fall into the hands of the Mohegans, who were pursuing them.

GREENVILLE is a pleasant manufacturing village on Shetucket river, (being about one mile from the city;) here is also great water power, there being a large dam built across the river. Norwich city is the southern terminus of the Norwich and Worcester Railroad, being 60 miles from Worcester; also connecting with New London on the south, by the New London and Northern Railroad to Vermont. It is 13 miles from New London, having connection with New York, New Haven, &c., to the west, and Stonington, Providence, &c. to the east. From here there is steamboat connection direct with New York by the New York & Norwich Transportation Company, running a daily line of fine steamers, it being the head of navigation; there is a steamboat train from Boston by Norwich and Worcester Railroad, and train from Bellows Falls, Vt., by New London and Northern Railroad. The total value of property $20,250,000. There are 7 national banks, 2 savings banks, as follows: Norwich National Bank, incorporated 1776, capital $220,000; Thames National, incorporated 1825, capital $1,000,000; Merchants National, incorporated 1833, capital $215,000; Shetucket National, incorporated 1855, and reorganized under the free trade banking law, 1862, capital $100,000; Uncas National, organized under free trade banking law, 1862, incorporated 1855, capital $300,000; First National, organized 1864, capital $580,000; Second National, organized 1864, capital $300,000. Norwich Savings Society, organized 1824, deposits $5,581,074. Chelsea Savings Bank, incorporated 1858, deposits $900,000. There are about 14,174 acres of land, dwelling houses number upwards of 1,950. The churches are as as follows: 6 Congregational, 3 Episcopal, 5 M. Episcopal, 3 Baptist, 1 Universalist, 1 Catholic, and 1 German Evangelical Lutheran Church. There is one very fine free Academy here, having endowments amounting to $100,000; also, a nice public library, containing 7,000 vols. There have been 21 Mayors since its incorporation as a city. The manufacturers are as follows:

C. B. ROGERS & Co. Among the many classes of labor saving machinery, none perhaps are of more importance than that for working wood, as that is brought in direct connection with the every day necessities of life. Among the manufacturers of wood working machinery, the firm of C. B. Rogers & Co. take the lead.—said to be the largest manufacturers and the oldest established firm in this business in the country. The business originally commenced at Keene, N. H., in the year 1841, where the late Wm. J. A. Fay commenced the manufactory, and who also invented several of the most important machines used in this kind of work, and which have been so long and favorably known as the Fay & Co. machines. In 1848 a branch manufactory was established at Norwich, Conn., under the supervision of one of the firm, Mr. C. B. Rogers, who has had the constant management of the business since that time. A few years later another branch was established at Worcester, Mass. In 1861, the Keene and Worcester shops were closed and the business consolidated at Norwich, where, from year to year, it has constantly increased.

In 1863 the company was incorporated as a joint stock corporation, with a capital of $200,000. The tools made are in brief, as follows, viz.: planing and matching machines, sash, door, and blind machinery, molding machines, one style of which is capable of making over 50,000 feet of molding per day, a feat said to be unequalled by any machine ever before known; mortising and tenoning machines, upright shaping, or irregular molding machines as they are sometimes called (C. B. Rogers & Co.) splitting and cutting off saw machines of all kinds; boring machines, and in fact nearly every kind of machines used in house building, carriage and car building, cabinet work, etc., nearly all of which are protected by patents. Among the smaller articles made, one of the most important ones, are the Boardman's patent barbed blind staples of which they have made nearly 100,000 pounds or 50 tons during the past year alone. This little article is used for connecting the rods to the slats, on the movable slat blinds, which are found on every house in the country. The old style of staple was simply a piece of wire bent up, and would pull out very easily. The patent staple is barbed or roughened on the point, (C. B. Rogers & Co.,) and when once driven in, require a strong pull to get them out.

The firm are also largely engaged in the manufacture of skates of all kinds, the Blondin being the specialty. This has a support for the ankle, and is a great assistance both to the beginner and those with weak ankles, and adds greatly to the comfort and pleasure of the best skaters. The factory consists of a main building 4 stories high and 25x45 feet; 2 wings—one 4 story 65x40 feet, and one 3 story and 50 x 20 feet, all being built of brick. These form 3 sides of a quadrangle, the fourth being occupied by a store house for raw material, 2 stories high and 100x30 feet. The blacksmith's shop about 30x25 feet, with 8 forges, joins the main building. The company also own and carry on their own foundry, which has a floor space of 120x80 feet, a total of 9,600 sq. feet, with 2 furnaces. The number of men employed is about 165, the amount of pay roll every week being about $2,000. The power employed to run the works is an 80 horse power engine, patented by the Superintendent and built by the company. The machines made by them are known over the whole world. They have sent them to England, France, Germany, Austria, Australia and the east and west coasts of South America, and New Zealand; also, to California and all parts of the United States and Canadas. Their machines received the only gold medal awarded this branch of

awarded at the PARIS EXPOSITION of 1867. Being the HIGHEST PRIZE and ONLY GOLD MEDAL

This GOLD MEDAL was

awarded in this class.

Manufacturers of

Planing and Matching, Sash and Moulding, Mortising and Tenoning, Shaping, Boring and Sawing

MACHINES.

SAW ARBORS, WOOD Lathes, Chair and Spoke Lathes, Scroll Saws, &c., &c.,

EXPOSITION UNIVERSELLE DE MDCCCLXVII A PARIS
C. B ROGERS & Cie
RECOMPENSES

Manufactory, Norwich, Ct. Wareroom 109 Liberty Street, N. Y.

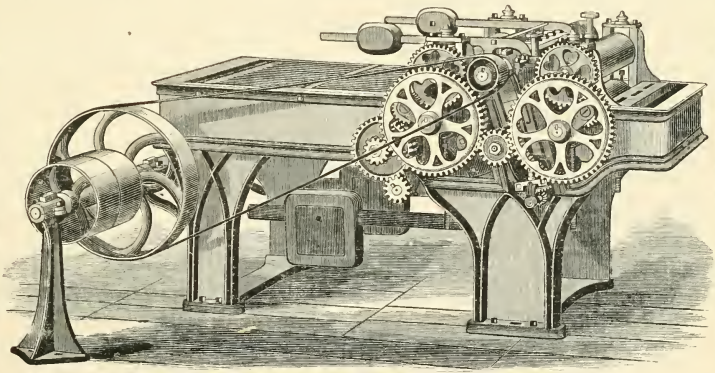
C. B. ROGERS & CO.,

Manufacturers of the most improved

Wood-Working MACHINERY.

Patent Skates and Boardman's Patent Barbed Blind Staples.

Clipper Planing Machine.



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See Sketch of our Business Opposite Page.

industry at the Paris Exposition of 1867, over all competitors from this and foreign countries. They also received medals at the great Crystal Palace Exhibition, at London, 1852, and nearly 100 medals and diplomas at various exhibitions and fairs in this country. The company have a warerooom for the sale of their machines at 109 Liberty street, New York, and have also agencies at Chicago, Detroit, Philadelphia, Baltimore and most of the large cities in this country.

Richmond Stove Co. This company was incorporated July, 1867, with a capital of $100,000, Apollos Richmond, President; Geo. G. Richmond, Treasurer, and S. G. Richmond, Agent. This company have a fine location for their business, on the west side of Thames River, within a short distance of the business portion of the city, being on the line of the Northern Railroad, and with a fine wharf at which vessels can discharge or load at any stage of the tide. They have facilities for receiving and transporting their raw stock and manufactured goods, which are unequalled. Their foundry building is 250 feet long by 70 wide, and their warehouse 125 feet long by 35 feet wide, 4 stories, with an L 35 feet by 38 feet. From the back door of the building a car can be loaded and sent to the west to Chicago, north to Montreal or east to Maine without change of freight. They employ about 70 men, and few stove manufacturiug establishments in the country have been so successful considering the short time it has been in operation. The secret is excellent work and popular patterns, all of the latter of their own design, and comprise the celebrated Richmond Portable Range, Parlor Heater, Hanging Dome Furnace, Medallion and Golden City Cooks, Air-Tight castings, &c. The officers of the company have had a long experience in the business, having been identified with similar establishments in Providence, R. I.

The Norwich Steam Boiler Works were established in 1845. Manufactures steam boilers of every description, and repairs old boilers. The main building is of wood 35x 70 feet. They use an engine of 10 horse power, built by John A. Barbour, and one upright boiler, made by William Trolan, proprietor of the above works. One store house near the main building is 18 feet square. The works are situated on Thames street.

C. W. Manwaring, manufacturer of doors, sashes, brackets, moulding, &c. Commenced business in April, 1865; occupies a building of upwards of 1900 square feet, and employs about 15 hands; uses an engine of about 3 horse power, and runs 1 circular saw, 1 moulding machine, 1 scroll saw, 1 foot mortising machine, and 1 tenoning machine; located in Coit's building, Central wharf.

Henry Peale sash and blind manufacturer. Business was established in 1858 by Henry Peale, who now occupies a one story building 50x100 feet. Average number of hands employed 12 to 14; uses 2 saws, 1 mortising machine, 1 tenoning machine, 1 upright saw, 1 borer, and 2 patent slat machines; has a 16 horse power engine and boiler, made by the Union Machine Company, Norwich.

Willoughby & Company, manufacturers of sashes, blinds doors, brackets, stair railing, and all kinds of finish for buildings. Business was commenced 17 years ago, by Willoughby & Co. They now occupy a two story wooden building, about 100x50 feet; employ 40 to 60 hands. The number of machines in use, are as follows: 2 planers, 2 sash, 1 power and 2 hand mortising machines, 4 circular saws, 1 borer, and 1 upright scroll saw. Amount of business varies from $50,000 to $100,000 per annum.

Norwich Pottery Manufactory, established by Sidney Risley about 30 years ago. The main building measures 100x30 feet, having an L 60x30 feet, the former building being 2 stories high, of wood, and the L a 3 story wooden building. Average number of employees 7, turning out $12,000 worth of pottery per year. The power is furnished by an engine of 6 horse power, built by the Union Machine Company, of Norwich, attached to the engine is an upright boiler, made by Pollard, of Norwich. The articles manufactured are Rockingham ware, stone ware, drain pipes, &c.

Norwich Lock Co., manufacturers of door and padlocks, trunk and other kinds of locks. The company was incorporated in 1865, and now occupy the buildings formerly used by the Bacon Fire Arms Company. The building is 150x30 feet, 2 stories high, of brick. About 30 hands are employed. The motive power is furnished by 1 overshot and 1 turbine wheel. President, William A. Buckingham, Treasurer, E. A. Cobb, General Agent, Joseph Selden.

Ray & Morey, manufacturers of handles for axe, adze, pick, sledge, hatchets, and hammers, also oak and hickory spokes. The present firm commenced business in April, 1868. They were formerly of the firm of Turner & Day of Baltimore. The main building is 100x40 feet, 2½ stories high. Engine and boiler rooms is 60x14 feet, and another room is 30x60 feet. All the buildings are constructed of brick. At present 35 hands are employed. Three cords of wood are required per day for handles, in order to keep the factory running. There are between 90 and 100 dozen handles turned out per day. The factory contains an engine of 45 horse power, and one flue boiler. The grounds occupied by the factory are 300x100 feet. The company supply their own wood, most of which they obtain in the Southern States.

Chelsea Machine Works manufacture all kinds of fine machinery, but make a specialty of screw cutlery, and couplings. Any nice engine lathe made, specially for making watchmaker's tools. The company was established in Nov., 1865, by The Chelsea Company. The buildings are all new, and erected by themselves; the main building is four stories high, 40x60 feet; blacksmiths' building attached to the main building is 40x30 feet, one story of brick; the engine and boiler house also joining the main building is 25x 30 feet, of brick; and coal shed 30x40 feet, built of wood. The number of employees varies from 25 to 50. There are 25 engine lathes, 4 planers, 2 upright drills, and one of each of the Universal milling machine, bolt cutters, boxing machines, and other tools required in machine shops. A low pressure engine of 40 horse power, built by Phillips, of Newark, N. J., and 1 tubular boiler 12 feet by 48 inches made by McKay & Aldus, East Boston, furnish the necessary power. They have lately received a diploma, from the American Institute; also, first class medal for the best work of its class on exhibition. The screw lathes made by this company are worked up to a system of steel guages, which secure perfect duplicate of corresponding parts, by which means they secure better workmanship, and perpetuate the excellence thus obtained.

The Union Machine Co., is one of the largest and best regulated of the many compauies now running. In the year 1850 Horace Walker, Noah Cole and two others, commenced the present business in a building on Franklin street, about half a mile from those now used, where they remained for six months, when Messrs. Walker & Cole took entire charge of the business and carried it on until 1862. At that time Horace and James Walker bought out Mr. Cole, and continued the business for two years, when another change took place, this time being incorporated under the title of The Union Machine Co., with a capital of $200,000. The buildings occupied are as follows: Main building, 210x60 feet, of brick, 3 stories and basement; a wing, running from the centre of the main building, 60x35 feet, also of brick, a part being 4 stories and part 1 story, the latter used for blacksmith shop and engine room. The boiler house is attached to the engine room, and is built of brick, 1 story

high; dimensions, 40x40, with an L of 3 stories, 150x35 feet. The number of employees at the present time is about 75. They use one of Cranston & Bates' engines and 2 boilers made by Wm. Trolan, of Norwich. They manufacture steam engines, machinists' tools, shafting, mill gearing, improved water-wheel regulators, self-stripping cotton-carding machines, railway heads and troughs, Connock's patent self-acting mules and mule regulators, and all kinds of cotton machinery.

MANUFACTURERS' DYE HOUSE, James Houston, Agent. All kinds of worsteds, braids, woolen and hosiery yarns, dyed in all colors, and equal to those imported.

The business was commenced in the year 1853, and now occupy four buildings, pleasantly situated on the Thames river, about a mile and a half from Norwich. The buildings are as follows:—No. 1, used for dye house, 60x24 ft., 1 story; No. 2, drying house, 40x20 feet, 2½ stories; No. 3, containing dye stuffs, 30x15 feet, 1 story; No. 4, hydra extractor, 33x15 feet, 1 story; also, 1 mill, 40x30 feet, 3 stories in height, used partly for storage. Number of employees, 7. A steam boiler of 50 tubes is used. The motive power is derived from one breast wheel.

GILMOUR BROS. make castings of all descriptions. They commenced business in 1865, and are soon to erect a large building; the one now used being about 50x50 feet, of wood, and 2 stories in height. The average number of men employed is 9. Amount of casting per day, from 1,000 to 1200 lbs. The power is derived from a turbine wheel of 4 horse power.

NORWICH FILE WORKS manufacture hand cut files, and rasps. The business was established in 1867, by C. A. Converse & Co. Size of building is 60x80 feet, two stories high, and is built of wood, the first floor being used for hardening, oiling, and store room; in the rear is situated the forging and grinding rooms, all departments being in handy communication with the office. The employees number about 30, turning out from 30 to 40 dozen per day. The water power is furnished by 1 turbine wheel, of 30 horse power.

J. HUNT SMITH manufactures the various kinds of fine braids. The business commenced under the firm of J. Hunt, Smith & Hedge, in 1864, and so continued until the year 1866, Mr. Hedge then retiring, and Mr. Smith since carrying on the business alone. The main building is a 2 story building, built of wood, being 100x30 feet; an addition 24x24 is used for office, &c.; store house is 15x30 feet, constructed of wood, and is one story high; dye house 40 x45 feet, is one story high, and is built of wood. There is used also 1½ stories in brick building adjoining, which is 40 x80 feet. The employees number about 60, and turn out 7000 doz. of fine braids per week, requiring some 3000 lbs. of worsted yarn, the whole making a total per annum of about 26,200,000 yards and keeping 400 braiding machines and 21,175 carriers, running in making up this large amount of braid. The running power is furnished by 1 Leffel wheel in brick building, and 1 Swaine wheel in main building. These mills are among the largest now running exclusively on braids.

In connection with the above mills there is in operation one worsted yarn mill, which is near the brading mill, and is 40 x80 feet, occupying 2 stories; also an L to the worsted mill. 40x30 feet, is 1 story high and is constructed of brick. This company commenced in the summer of 1867, under the name of J. Hunt Smith & J. Townson, which has continued successfully to the present time. There are 12 spinning and twisting frames, having about 1,700 spindles; there is 2,000 lbs. of combing wool used per week; the employees numbering about 30, turn out some 1,200 lbs. of fine yarn per week. The motive power is derived from a 30 horse power Leffel water-wheel. One 12 horse power steam boiler is used. The machinery is all imported, being of the nicest kind and requiring skilled labor to run it.

HOPKINS & ALLEN MANUFACTURING CO. are manufacturing the Bacon revolver and pistol, of Colt's pattern, and occupy one building, built of wood, 60x60 feet, and is 2½ stories high. They are employing from 30 to 40 hands at present. The motive power is derived from 1 turbine water wheel.

CLINTON WOOLEN MILLS CO., established 1865. Stock company, $200,000 capital. J. D. Sturtevant, President; Francis Cabot, Treasurer and Secretary; A. P. Sturtevant, Agent; manufacture white bed blankets, tweeds, and ladies' repellants. Run 10 sets cards, 15 jacks, 58 broad looms, &c. produce 100 cases goods per month, and do a business of about $400,000 per annum. The machinery is run by one 15 and one 75 horse power engine, with 3 boilers; also 3 Warren's turbine wheels, under 10 feet fall.

NORWICH WOOLEN CO. is a stock company, established in 1863, $100,000 capital. M. B. Wilds, President; A. P. Sturtevant, Treasurer; C. P. Sturtevant, Secretary; manufacture white bed blankets and tweeds, about 80 cases per month. Run 8 sets cards, 12 jacks and 41 broad looms, and do business amounting to $350,000 per annum. A 25 horse power engine, 2 boilers, and 3 Warren's turbine wheels, under 9 feet of fall, supplies the motive power.

FALLS COMPANY established business in 1844 for the manufacture of stripes, ticks, denims, drillings and shirtings. They occupy two mills, employ 450 hands, run 18,000 spindles and 422 looms, and produce 6,000,000 yards annually. They consume 2,500 bales of cotton yearly, and have a capital of $500,000.

NORWICH IRON FOUNDRY. Alfred H. Vaughan, present proprietor, having started the business in connection with his partners in 1854. For the last six years the business has been conducted in the name of Alfred H. Vaughan, the former partners retiring during the year 1862. The goods made are castings of every description, such as mill-gearing, pullies, couplings, hangers, paper mill and steam engine castings, water and steam-pipes, lamp-posts, columns, car-wheels, grate-bars, &c. The foundry is a one story brick building, about 50x90 feet. The pattern shop 50x70 feet. There is also another brick building, two stories high 25x50 feet. The average number of employees is about 45, who turn out about 900 tons of the various kinds of castings per year. The motive power is furnished by one of Cranston & Bates 25 horse power engines, having a locomotive boiler. All of the patterns formerly belonging to A. T. Pearce, are now in Mr. Vaughan's possession. The works are located at No. 8 Terry street.

OSSAWAN MILLS. John Turner, proprietor, and manufacturer of patent machine made picture and shade cord. Mr. Turner commenced this business during the year 1864, and now occupies about 3000 square feet of flooring. The number of machines required is 50, which make some 100,000 yards of cord per week, using up about 1,000 lbs. of jute and worsted. Some 12 hands are employed. Water power is furnished by a "Tyler Turbine Wheel" of 3 or 4 horse power. The factory is a nice brick building 3 stories high, situated on East Broad street.

SHETUCKET FOUNDRY CO. manufacture all kinds of iron castings, such as mill gearing, pulleys, hammers, paper-mill and steam engine castings, water and steam pipes, gas-light posts, columns, car wheels, patent grate-bars, fences, &c. The company commenced business in 1852 when the present large and substantial buildings were erected. The main building is of brick, 50x80 feet, and two stories high; one wing 80x25 feet, two stories. Engine and boiler

rooms attached to main building, 25x30 feet. Pattern house is at some distance from the other buildings, fire proof, 50x25 feet, has one story and basement. One other building two stories high, built partly of brick and partly of wood, used for storing patterns, is 80x25 feet. The buildings face on three streets, as follows: Franklin street, 100 feet, Willow street 250 feet; and Chestnut street, 100 feet; thereby affording plenty of light and air to the workmen, and allowing every convenience for the receiving of material and delivery of work as finished. The present company have carried on the business for the past four years, as a joint stock company. There are in use two cupola furnaces of large size. The amount of castings turned out is from 30 to 40 tons per month. One 13 horse power engine, and one new tubular boiler, furnish the necessary power. This company have in pattern houses upwards of $80,000 worth of patterns, mostly of modern styles.

THE SHETUCKET COTTON MILL is one of the largest and finest cotton mills in the country. This company started business as early as the year 1828, and were then known as the "Thames Cotton Co." The company changed hands in the year 1836, since which time it has gone under the name of "Shetucket Cotton Co." Their mills are situated on the Shetucket River, about ½ a mile northeast of Norwich and on the line of the Norwich & Worcester Railroad. There is a capital of $500,000 required for its extensive business. The goods manufactured by this company are white shirting, cotton flannel, ticking and striped shirting. The mill contains 15,000 spindles and 412 looms. The average number of employees at present is 400. There is consumed on an average about 5,000 pounds of cotton per day—2½ tons,—producing daily 20,000 yards, or about 1¼ miles of cotton cloth. The question naturally arises, where does so much cotton cloth go? If this mill alone produces 20,000 yards per day, what an innumerable number of yards must be produced by all the other mills in New England. It may seem strange that the immense number of yards turned out by the New England factories alone every year, does not overstock the market, yet they do not, and though the stock on hand is large, its consumption keeps pace with its production.

The Shetucket Company use six large buildings in the manufacture of their various cloths. The main building is used for weaving, carding, ring spinning, mule spinning, and a repairing shop, and is 166x40 feet, containing 6474 square feet, and 10 feet, 10 inches high, making 76,602 cubic feet. The second floor is used for carding; it is 166x40 feet, 6,400 feet and 10 feet 8 inches high, making 75,404 cubic ft. The third floor where the ring spinning is carried on, is 166 x40 feet, containing 6,400 square feet, and is 10 feet 6 inches in height, making 74,245 cubic feet. The fourth floor which is used for weaving is 166x40 feet, containing 6,400 square feet. It is 10 feet 8 inches high, making 75,414 cubic feet. The fifth floor used for mule spinning is 166x40 feet, 6400 square feet, and is 9 feet, 9 inches high, making 68,942 cubic feet.

The second building is used for spooling and weaving. The spooling room is 354 feet long, containing 8,407 square feet and 72,860 cubic feet. Part of first floor, used for beaming room, being 117x23 feet,—2,778 square feet, 28,058 cubic feet—the remaining 237 feet of first floor being used for a store room. Third building is used for dyeing, drying, sizing and boilers. The first floor, of 3d building, used for sizing being 22, 8, x 31 feet 4 inches,—707 square feet; also, for large coal room, boiler room 30x39 feet,—1,170 square feet; 2d floor is used for dyeing and drying room, 126, 8, x 25 feet 6 inches; 3,239 square feet, dye vat additional, 34, 4 inches x 59 feet; 2,026 square feet. Fourth building, used for picker room and breaker room; 1st floor, used for picker room 54x70 feet—3780 square feet; 2d floor, used for breaker room 54x70 feet—3,780 square feet. Fifth building, carding building room, for carding on 1st floor, 30, 9, x 8 feet 6 inches; 261x9, 2,349 cubic feet; 2d floor, used for spinning, 30, 9, x 8 feet 6 inches, 261x8 feet 6 inches; 2218 cubic feet. Main south carding building is used, on 1st floor, for carding, being 90, 8, x 31 feet; 2,810 square feet, x 9, 25,290 cubic feet; 3d floor is used for spinning, 90, 8, x 31 feet; 2810 square feet, x 8, 6, 23,885 cubic feet. Sixth building is used for weaving, 2 stories; 1st floor is 127, 8x34 feet; 4,342 square feet, 56,810 cubic feet. 2d floor 126, 8, x 34, 4,342 square feet, 48,288 cubic feet. Seventh building, used for napping room, 16x58 feet 6 inches; 936 square feet, x 10, 9360 cubic feet. Eighth, carpenter's shop, 768 square feet. Across the railroad track, there are 2 brick and fire proof store houses 100x50 feet, each containing 2 floors. There are about 100 tenement houses connected with the factory, some of which are constructed of brick while others are constructed of wood. They own also about 200 acres of land, of which 150 acres are used for cultivation by the employees of the mill. J. B. Upham, of Boston, President, Gardner Green, Treasurer, R. H. Plummer, Superintendent.

BARNES & CO., manufacturers of machine-cut corks. This business was established in 1858, by W. D. Crocker. The factory is a 3 story brick building 50x70 feet, the company using two floors. There are 16 employees, and 10 machines. One 40 horse power engine, having a cylinder boiler, furnishes the motive power. Amount of business per year upwards of $25,000.

ALLEN & BRADY LOCK CO., manufacturers, under the Allen & Brady patent, of safe and vault locks. Also, a new style of commercial lock for stores, mills, offices, warehouses, etc. The company was incorporated October, 1867, with a capital of $25,000. This lock is claimed to be simple in construction, as cheap as an ordinary lock, and that it cannot be picked or opened except by its own key. The key is made of thin steel, but a trifle over ⅛ of an inch in thickness, and when inserted in the lock it is not turned, as in common locks, but is only a guide for the various tumblers to move in the proper manner, when a door knob is turned, which virtually unlocks it. The building used is of brick, 40x80 feet. The principal machines are 2 lathes, 2 drill presses, 1 engine milling machine, 1 Universal milling machine, 1 grinding machine, and 1 power press. There are some 200 dozen turned out per month. A 6 horse power steam engine is used.

CHELSEA FILE WORKS manufacture hand-cut files of every description. The building occupied is of brick, 1 story in height, and 40x50 feet in size. The whole process of file manufacture is carried on under one roof. The company was incorporated in April, 1864, with a capital of $12,000; and turns out about 600 dozen per month, employing from 35 to 40 hands. The steam power used is taken from a large engine in the adjoining building. L. W. Carroll, President; H. L. Batts, Secretary and Treasurer.

MOTOTON, a flag-station on the New York and New Haven Railroad, 36½ miles from New Haven, and 39½ from New York.

ONECO. About 25 miles Providence, and 62 from Hartford. A country station on the Providence Hartford and Fishkill Railroad.

PLAINFIELD, 35½ miles from Providence, 54½ from Hartford, 44 from Worcester and 16 from Norwich. The Norwich and Worcester Road

THOMAS MANUFACTURING COMPANY,

Thomaston, Connecticut,

Manufacturer of

BRASS, GERMAN SILVER, GILDING METAL, ETC.,

IN SHEETS, ROLLS AND WIRE.

COPPER RIVETS AND BURS.

Brass for Printers and Galley Plates, to width and weight; German Silver Blanks, for Forks, Spoons, and Hollow Ware.

All Orders Carefully and Promptly Executed.

D. S. PLUME, *President.* [ESTABLISHED 1853.] J. B. LOWREY, *Secretary.*

crosses here. The village is located on a hill ½ a mile distant from the depot. A seminary was formerly located here incorporated 1783, where were educated many of the sons and daughters of the fashionables of many years ago. The building is still standing, a monument to the happy hours and sweet remembrances of the school days of those who have long since passed away. The houses are built on one main street and are shaded by the favorite New England elm. Moosup River affords this town a good water power.

PLAINVILLE, 13¾ miles west of Hartford, and 18¾ east from Waterbury, 27 north of New Haven, at the junction of the Providence, Hartford & Fishkill and Canal Railroads. Three churches and 1,500 population. Located here is the

PLAINVILLE MANUFACTURING CO., incorporated 1850, for the manufacture of merino shirts and drawers. They consume raw material to the amount of $10,000 per month, producing about 20,000 dozen per year. They run 6 sets of woolen machinery in a mill 225x50 feet, 5 stories; employ 100 persons. A 60 horse Woodruff & Beach engine supplies the power. N. M. Welch, President; H. L. Welch, Secretary and Treasurer.

HIRAM HILL commenced the manufacture of hames in 1830. He occupies a building 60x40 feet, 3 stories, and 1 48x32 feet, 2 stories; employing 50 persons. His manufactory is located half a mile from the station, on the Pequabuck river.

GEORGE HILL'S manufactory of clocks, dials and tablets is situated half a mile from the depot, in a building 20x30 feet, 3 stories. Mr. H. commenced business in 1860, employing 8 persons, and manufacturing about 10,000 dials per month.

CLARK & COWLES, manufacturers of clock trimmings, brass, iron and copper rivets, &c., occupy a 2 story building 75x24 feet, with L 30 x 24 feet, 1 story. This business was established in 1848, and now employ 20 persons.

GEO. A. SMITH commenced the manufacture of fifth wheels for carriages, and also dashers, in 1860, in a building 60x40 feet, 2 stories; employing 8 persons.

PLANTSVILLE, situated 21 miles from New Haven and 55 from Northampton, on the Canal Railroad, at the intersection of two small streams called the West River, and Quinipiac, has a population of about 1000 and 1 church.

PLANT'S MANUFACTURING CO., for the manufacture of screw bolts, also, Eagle Arms Company, superior front loading revolvers. This company was incorporated in 1853, capital $100,000. A. P. Plant, Pres. E. H. Plant, Secretary. They have several buildings; 1, 172x30, ell 18x25, one story. Forging and machine shop, also, 1 room for storage of iron. The power in this building is furnished by a 40 horse engine, and flue boiler, built by Woodruff & Beach of Hartford, also, a 40 horse turbine wheel 32 inches, 10 ft. fall; No. 2, 22x38, 1 story, box shop; 3d, 113x23, 1 story, forging shop, with blacksmith's shop attached 20x25, 1 story also attached to No. 3 building is a forging shop, 30x34, 1 story, with boiler house and engine house 18x44, and 48x 22, 1 story. The engine in this building, is in connection with the water wheel furnishes power for the works. No. 4 65x25, machine room, 2 stories with ell 80x30, part 1 and 2 stories finishing building. The office is 30x20, two stories, store house 30x50, 1 story. They employ 165 hands; use 1200 tons iron, and 500 tons coal yearly.

The S. Stow Manufacturing Co., was incorporated in 1853, capital $150,000 for the manufacture of tinsmiths' machines and tools, meat cutters, and general hardware. Their main building, the machine shop, is 100x35, two stories. Motive power furnished by a 20 horse turbine wheel, 44 inches, 10 feet fall. Blacksmith's shop 80x35 ft. 1 story; casting and rolling shop 40x30, 2 stories; power furnished by main building; foundry 80x40, 1 story, ell 30x 40, 1 story; office and pattern room 40x25, 2 stories; engine house 20x20, 1 story. Have in case of necessity a 15 horse power engine, with tubular boiler, made by Woodman, of New York. This company employs 100 hands, and uses 600 tons pig iron, 750 tons wrought iron per year, besides burning 600 tons coal.

Plymouth, 41 miles from Bridgeport, on the Naugatuck Railroad. The village is located one mile from the depot, on the Naugatuck river, in the town of Plymouth. Population about 500. Thomaston, a short distance from the Plymouth depot, is also on the Naugatuck river. Contains 3 churches and about 1,500 inhabitants.

The Thomas Manufacturing Co., located at Thomaston, Conn., upon the Naugatuck Railroad, nine miles north of Waterbury, was established in 1853, has a capital of $250,000. Are exclusive in the manufacture of sheet and rod brass and German silver; brass, German silver and copper wire; copper and brass rivets and burs; platers' and gilding metal, &c.

The mill building is 180 x 70 feet, with wing 60 x 80 feet, and the necessary out buildings for machine and blacksmith shops, &c.; the whole is lighted with gas and supplied with the most complete set of rolling and drawing machinery for the manufacture of sheet brass and wire. Its facilities are equal to any mill in the State. The power is supplied by a 300 horse low pressure condensing beam engine, with two 40 feet boilers of 7 feet diameter.

From 90 to 100 hands are employed; 100 cords of wood, 100 tons of anthracite coal and 150,000 pounds of copper and spelter are required to produce a monthly product.

American Knife Co., manufacturers of pocket cutlery, shears and razors. The business was established in 1849. They occupy several buildings, the principal of which are as follows:—Main building, 120 x 30 feet, 3 stories; forging shop, 50 x 20 feet; office and warehouse, 40x20 feet. They employ 100 hands.

E. Blakeslee, carriage manufactory. Commenced business, 1852. His buildings for the manufacture of carriages are as follows: 50x24, 2 stories, blacksmith, trimming and painting, 80x24, wood-work and painting and storing. Employs 10 hands and turns out about 100 carriages a year.

Shelton & Tuttle, carriage manufacturing of all kinds, principally light. Commenced business 1838, occupying 3 buildings. No. 1, 90x24, 2 stories, wood-work; No. 2, 100 x30, 3 stories, finishing and painting; No. 3, 85x24, 2 stories, blacksmith shop and engine room. Engine and boilers made by Woodruff & Beach of 15 horse power. They make about 200 carriages per year, sending them principally to the west.

The Seth Thomas Clock Co. was established in 1813, for the manufacture of all kinds of clocks. The officers of the company are Aaron Thomas, President; S. E. Thomas, Secretary and Treasurer. Their main building is 150x50, 4 stories, ell 150x30, 2 stories, employing 100 hands. Their motive power consists of a 60 horse power turbine wheel. This company make about 10,000 clocks per month.

The Seth Thomas Sons & Co. commenced business in 1866. Their factory building being 150x50, 3 stories. Motive power derived from a 30 horse power turbine wheel. This company employs 60 persons, turning out over 30 clocks per day.

I. B. Woodward, manufacturer of leather for harness saddles, &c. Commenced business 1864, as successor to I. & A. Woodward, who commenced business in 1840. A 3 story building 130x24. Employs 7 hands and tans about 1,500 beef sides per year, and 1,600 calf skins, using about 240 cords oak and hemlock bark. He uses a breast wheel of 25 horse power.

Poquonnock, 129 miles from New York, 103 from Boston and 3 from New London. A country village, on the New London, Stonington and Providence Railroad. A river by the same name runs near this station. The inhabitants are mostly engaged in the fisheries.

Putnam, 26 miles from Worcester, 33¾ from Norwich, on the Norwich & Worcester Railroad, and about 70 from Boston. The Boston, Hartford & Erie Railroad was built from East Thompson Junction to this place, and trains commenced running Sept. 1, 1868. A manufacturing village of about 4,000 inhabitants, containing 5 churches, 1 bank, 2 hotels and 1 newspaper. The French River empties into the Quinebaug River a short distance above this place.

The Putnam Manufacturing Co. was incorporated in 1865, with a capital of $300,000, Benj. R. Vaughan, President; Wanton Vaughan, Treasurer; Chas. F. Bliven, Agent. The mill is 200x50, 6 stories, with office, packing room, &c. adjoining, about 150x30, 3 stories. The mill has 17,000 spindles, 350 looms, consuming 15,000 lbs. of cotton, and producing 55,000 yards of light sheetings (40-inch) per week. The power is supplied by 3 Swaine 48-inch wheels, the fall being 15 feet. A 100 horse power Corliss engine is used when needed. Number of hands employed, 300; using No. 36 yarn. Office in Providence on Custom House street.

Whitemore & Tourtellotte, commenced the manufacture of women's boots and shoes, in January, 1868, being successors to E. T. Whitmore, who established the business in 1856; the building occupied is 30x60, three stories. Employ 75 persons, producing 1,000 cases per year; doing a business of about $50,000.

Chas. M. Fisher, commenced the manufacture of women's shoes, &c. in 1855. He occupies the 2d and 3d stories of a wooden building 40x40. Employs 75 persons, and produces 1,000 cases per annum.

Corbin & Tourtellotte occupy a 1½ story building 60x 20 feet, for the manufacture of women's shoes, &c. Employ 40 persons; commenced in 1866; produce 500 cases per annum.

Truesdale, Phillips & Co. commenced the manufacture of doors, sash and boxes, in April, 1868. They employ 12 persons in a building 36x60, two stories, built of wood; consume 25,000 feet of lumber yearly. A Tyler 30 in. wheel supplies the power; the fall is 13 feet.

Harris Woolen Co., capital $150,000, manufacturers of fancy cassimeres. J. W. Wheelwright, President; Thomas Harris, Treasurer; M. J. McGuirk, Superintendent. This company occupy a new mill built in 1866, 150 x 52 feet, 2 stories and French roof, and an old mill 100x50 feet, 6 stories and attic. Employ 150 persons; consume 2,500 pounds

of wool per day, and produce 36,000 yards per month. The mill has 12 sets of woolen machinery, 40 broad (Greenhalch) looms. One overshot wheel supplies the power, the fall being 33 feet. Wheelwright, Pippy & Co., Agents, 47 and 49 White street, New York, and 89 Summer street, Boston. Office of Thomas Harris, Treasurer, 68 Westminster street, Providence, R. I.

M. MORIARTY, proprietor Saxon Woolen Mills, commenced the manufacture of fancy cassimeres in 1863. The mill is situated on the Quinebaug, and is built of stone, with wing of brick, the whole together being 252 x 40 feet, 3 stories, with dye house, &c., in the rear, built of brick, 100x30 feet, 2 stories. This mill has 7 sets of woolen machinery, consuming 360,000 pounds of wool and producing 275,000 yds. per year. A 36 inch Tyler wheel supplies the power, the fall is 32 feet. Agents in New York, Whittemore Peet, Post & Co., Leonard, corner Church street.

M. S. MORSE & Co. occupy 3 mills for the manufacture of 42, 40 and 34 inch bleached sheetings. The mill on the west side of the Quinebaug is 200 x 45 feet, 3 stories and basement, built of stone about 20 years ago. The mills on the east side are 103x43 feet, 4 stories, built of brick about 26 years ago, and 105 x 45 feet, 4 stories, respectively, built in 1856, with picker room, &c., attached, 20x15 ft., 1 story. In the three mills there are 20,500 spindles, 405 looms. They consume 40 bales of cotton per week, and produce 72,000 yards. Two breast and 1 double 56 inch Leffel turbine wheel supplies the power; the fall on the west side is 17 feet 1 inch, at the brick mill on the east side 18 feet, and at the new stone mill 17½ feet. In the west mill they use No. 64 and 68 reed and put in 60 and 72 picks; in both mills on the east side, 64 reed and 68 picks. G. C. Robins, Supt.

READING. A station and town in Fairfield county, on the Danbury and Norwalk Railroad, about 18 miles from Norwalk. This town derives its name from Col. John Reed, one of its first settlers. The soil is good, but the surface is rough and hilly; watered by the Saugatuck and Norwalk river. This town is the birth place of a noted poet, a man of science, politician, philosopher and philanthropist, Joel Barlow, LL. D. He died in Poland, 1812.

RIDGEFIELD. A station and town on the Danbury and Norwalk Railroad, in Fairfield County, about 14 miles from Norwalk. The Indian name of the town is Caudatowa, a word signifying *high land*. The town is very elevated and commands extensive views of Long Island Sound. The soil is a strong gravelly loam, and produces both grain and grass very abundantly. It is watered by the Saugatuck, Norwalk and a branch of the Croton rivers.

ROCKVILLE, 5 miles from Vernon, 17¾ from Hartford. A manufacturing village on the Hockanum river leading from Shenipsit lake, one mile distant. The place has 4 churches, 2 banks and 1 hotel. Rockville is the terminus of the Rockville Branch of the Providence, Hartford & Fishkill Railroad.

THE PANOLA MILLS was incorporated in 1860 with a capital of $25,000. L. Bissell, President, Joseph Selden, Secretary and Treasurer. The mill is 120x35 feet, 3 stories and attic, built of stone. They run 3,000 spindles and 60 looms. Employ 50 persons; consume 10 bales of cotton, and produce 2,000 yards of ¼ sheetings, 1,800 thread per week. A 4 feet Reynolds wheel supplies the power.

THE SPRINGVILLE CO. was incorporated in 1833, with a capital of $24,000. Chauncey Winchell, Sen., President; Cyrus Winchell, Agent, Secretary and Treasurer; R. G. Holt, Superintendent. The mill is 84x33, three stories and basement of stone; 1st story brick, 2d and 3d, wood. They run 3 set of woolen machinery, 28 narrow looms; employ 35 persons; consume 400 pounds of stock per day, and produce 700 yards of black satinet. An overshot wheel supplies the power; the fall is 18 feet. Turnbull, Slade & Co., White street, New York, Agents.

THE WINDERMERE WOOLEN CO. is situated in the village of Windermere, about 2 miles from Rockville depot. This company was incorporated in 1860, with a capital of $40,000. E. D. Jordan, President; J. W. Thayer, Treasurer. The mill is built of brick, 160x44, five stories, basement of stone. They run 8 set of woolen machinery, 45 broad (Crompton,) looms. Employ 125 persons, consume 800 pounds clean wool, and produce 1,000 yards of fancy cassimeres daily. A 25⅓ by 20 feet breast wheel, supplies the power, the fall is 24 feet. The water is brought to the mill through a trench three-quarters of a mile in length. Jordan, Marsh & Co., Boston and New York, Agents.

THE THOMPSON WADDING CO. is located in the same village as the establishment above. It was incorporated in 1860, with a capital of $8,000, John W. Thayer, President, L. E. Thompson, Agent, Secretary and Treasurer. The mill was built in 1860, and is 220x27, part 3 and part 1 story, with L 60x27, 3 stories; employ 20 persons and produces 1,500 pounds of wadding per day. A 11 feet breast and a 26-inch Leffel wheel supplies the power. The fall is 10 8-12 feet. A shoddy mill is connected with the wadding department, producing 600 pounds per day.

CARLISLE COMPANY was incorporated in 1863 with a capital of $80,000. J. N. Stickney, President, Joseph Selden, Secretary and Treasurer, Julias Rich, Agent and Superintendent. The mill is 127x40 feet, 3 stories in front and 5 in the rear, built of brick, in 1863. A wing 39x60 feet, 2½ stories, used for a dye house, &c. They employ 75 persons, and manufacture spool cotton. Their machinery consists of 24 winders, 4 spoolers, 40 cards, 2 drawing frames, 7 Brown's speeders, 10 spinning frames, 10 twisters, 4 warpers, 1 pair mules, (1,128 spindles,) 1 pair mules, (810 spindles,) 3 reelers, 7 dressers. They consume 300 pounds of raw cotton per day, and spin, card and wind 1,000 dozen spools (2,400,000 yards,) per day. A 20x20 foot breast wheel, without a shaft, made by the Franklin Foundry & Machine Company, supplies the power for the works, the fall is 16 feet.

FLORENCE MILLS were incorporated 1853, with a capital of $225,000, Geo. Kellogg, President; Geo. Kellogg, Jr., Agent, Secretary and Treasurer; S. B. Gould, Superintendent. The main mill, built in 1866, is 200x50, 3 stories with French roof and basement, built of brick; tower in centre 112 feet high. They run 11 sets of woolen machinery, employ 170 persons, consume 900 pounds of stock per day and produce 450 yards of double-width Moscow beavers, tricots and coatings; they run 50 broad (Crompton & Thomas) looms. The power is supplied by a breast wheel 20x22 feet; the fall is 19 feet. There is a store and dye house, 110x35, with L 65x35, 2 stories and basement, built of wood, in addition to other buildings. Noell & Oelbermann, 105 Reade street, New York, Agents.

THE SHENIPSIT MILLS. Joseph Selden, proprietor. The main building is 120x35, 3 stories, built of wood, with stone basement. They employ 30 persons and manufacture 600 yards of satinets per day, running 3 set of machinery, and 30 looms. A 4 feet turbine wheel supplies the power, the fall is 10 feet. Austin, Dale & Company, 56 Leonard St., New York, Agents.

E. H. Robinson & Co., commenced the manufacture of special machinery and jobbing in 1866. They occupy the 2d story of building owned by the American Mills Company. They employ 5 persons, use 1 planer, 4 lathes, 1 upright drill and 1 hand lathe; the power is supplied by a shaft from the American Mills Company's wheel.

The Glasgow Thread Co., Clark Holt, proprietor. Elijah Holt, Superintendent. This mill is 44x120, 4 stories and attic, built of brick, another adjoining is 70x40, 3 stories and attic. This company employs 140 persons and produces 1,400 dozen of thread per day, consuming 600 pounds of stock. A breast wheel 23x16, built by the Franklin Foundry and Machine Company, supplies the power. The fall is 19 7-10ths feet. The machinery used consists of 40 cards, 18 spinning frames, (128 spindles each,) 3 pair mules, (2,816 spindles,) 3 spoolers (180 spindles,) 10 dressers and 24 winders.

The Hockanum Co. took its name from the river on which it is situated, was incorporated with a capital of $100,000. George Maxwell, President and Agent; Geo. Sykes, Superintendent. The mill was built in 1856; it is 190 x 36, 5 stories, built of wood, with a brick basement. They run 8 sets of woolen machinery, 30 broad Crompton looms; employ 125 persons; consume 1,100 pounds of cotton per day, and produce 22,000 yards of fancy cassimeres per month. A 20 feet breast wheel supplies the power, the fall is 18 feet. Pomeroy, Adams & Co., Agents, 70 and 72 Leonard street, New York.

The New England Co. was incorporated in 1841, with a capital of $60,000, Josiah Hammond, President; J. C. Hammond, Jr., Secretary and Treasurer; A. Park Hammond, Agent; Samuel J. Chaffee, Superintendent. The main mill is 192x34, 2½ stories, built of wood, with a stone basement; dye and wool house 150x39, 2 stories and basement. They run 9 sets of woolen machinery, employ 150 persons, consume 1,000 pounds of cotton per day and produce 600 yards of fancy cassimeres. There are 34 broad and 8 narrow Crompton looms. The mill is run by a 24x 17 feet breast wheel; the fall is 20 feet. Thomas & Co., Agents, 106 Reade street, New York.

Leeds Company was incorporated in 1843, with a capital of $36,000, Aaron Kellogg, President, Frank Grant, Secretary and Treasurer, A. R. Chapin, Agent. The mill is 127 x35, 6 stories and basement, built of wood, with a wing 105x46, brick, 3 stories with basement, dry house 125x30, 2 stories wood, with stone basement. This company run 8 sets of woolen machinery, producing 1200 yards of satinets and cassimeres daily; a 26x20 feet breast wheel supplies the power for the mill; the fall is 22 feet. No. of employees, 65. Nathan Day & Co., 169 Church street, New York, Agents.

The American Mills were incorporated in 1847, with a capital of $100,000. Calvin Day, President; Charles Seymour, Treasurer; J. J. Robinson, Secretary and Agent. The mill is 200x40 feet, 5 stories and attic; wool house 60x45, 2 stories and basement; store house and machine shop adjoining. They employ 175 persons, run 14 sets of woolen machinery, 36 broad and 18 narrow (Crompton) looms; consume 1,800 pounds of wool and produce 1,200 yards of fancy cassimeres per day. A 40x12 feet breast wheel supplies the power; the fall is 40 feet. Sprague, Colburn & Co., 55 and 57 White street, New York, Agents.

Rock Manufacturing Co. was incorporated in 1821 with a capital of $125,000. Allen Kellogg, President, D. W. Harris, Secretary and Treasurer, George Kellogg, Agent, C. Fitlon, Superintendent. The main building is 165x45 feet, 5 stories, 2 of them stone and 3 wood, with wing 90x45 feet, 2½ stories, stone; another 100x30 feet, 4 stories, wood, basement of stone, store house 75x41 feet, 3 stories, stone; dye and woodhouse, 125x41 ft., 2 stories stone; boiler house 45x48 feet, 2 stories, stone; store house 100x30 feet, 1½ stories, brick. They run 16 sets of woolen machinery, 18 broad and 52 narrow (Crompton) looms. Employ 200 persons; consume 1,800 pounds of wool per day, and produce 350,000 yards of fancy cassimeres per year. Two breast wheels 28½x17 and 18x8 feet respectively, furnish the power for the mill; the fall is 27½ and 22 feet. Thomas & Company, 106 Read street, and Pomeroy, Adams & Co., 70 Leonard street, New York.

SANFORDS. A country station on the Danbury and Norwalk Railroad, about 16 miles from Norwalk.

SAYBROOK, 31½ miles from New Haven, 18½ from New London, 108 from New York and 124 from Boston, situated at the mouth of the Connecticut river, and one of the oldest towns in the State. The harbor is at the mouth of a handsome cove making up from the Connecticut river, and is resorted to by coasters in bad weather. The bar at the mouth of the Connecticut river is an impediment to navigation. Vessels of a moderate draught are often obliged to pass it with part of cargoes. The depth of water at the bar at spring tides is about 12 feet. A bridge is now being built across the river near this place, which will impair the commercial interests of Hartford and other cities on the river. The first building designed for the collegiate school, since named Yale College, was built here in 1700, and remained here 17 years. Fifteen commencements were held here when after much opposition it was removed.

SEYMOUR, 12 miles northwest of New Haven, on the Naugatuck Railroad, a station and town in New Haven County.

New Haven Copper Works, Hendricks & Lissberger proprietors, office 255 Pearl street, New York. This firm is composed of three members, Mortimer Hendricks, L. Lissberger & Harmon Hendricks, under the firm name of Hendricks & Lissberger. Their mill is styled the New Haven Copper Works, originally in the possession of Wm. W. Goddard, a wealthy Boston merchant, whom the present firm succeed. Both the Messrs. Hendricks are grandsons of Harmon Hendricks, an old New York merchant, who established the first metal house in New York city, more than half a century ago. Their works are about 200 feet square, built in the most substantial manner of massive granite with a metal roof, situated on the Naugatuck River, of which stream they are the owners of ¼ the water power at this place. The fall of water is 18 feet. They employ from 35 to 40 hands and they claim that their machinery is the beaviest and most complete of any copper rolling mill in the country. The engine is Woodruff & Beach's make, 300 horse power; the rolls are the largest in the United States, and there is but one set larger on the other side of the water; they are 10 feet in length and weigh some 40,000 pounds.

They produce from 4,000 to 5,000 pounds of manufactured copper daily, and also have a separate building for the manufacture of copper kettle and washboiler bottoms, of which they sell some 300,000 pounds annually. They have no agents, and sell their own goods at their office, 255 Pearl street, New York. Their superintendent has had 25 years' experience in the manufacture of copper, and is one of the most competent refiners this side of the Atlantic.

NEW HAVEN COPPER WORKS,

SEYMOUR, CONN.

HENDRICKS & LISSBERGER, Proprietors,

MANUFACTURERS OF

COPPER,

COPPER KETTLE AND WASH BOILER BOTTOMS.

Office, 255 Pearl Street, New York.

☞Having the largest and most complete Rolling Mill in the United States, we have facilities for producing work unsurpassed.

United States Pin Company. This company commenced business in 1860, for the manufacture of pins. They occupy a building 40x90 feet, 3 stories and basement, ell 40 x20, 3 stories situated on the Naugatuck river, having a fall of 20 feet; their machinery is driven by a water wheel of 50 horse power. This company employ 40 hands, producing on an average 1200 packs of pins daily.

The selling agents of the company are Hitchcock & Castle. Billings Chaffee & Company, New York; Roof, Calladay & Trout, Philadelphia.

The officers of the company are Henry Hotchkiss, President, J. I. Griffin, Secretary and Treasurer.

S. Y. Beach commenced the manufacture of paper in 1850. The main building is 200x60 feet, and is one and a half stories high. Uses Tally water wheel 3 feet; two steam engines of 40 horse power, made by Fishkill Landing and Machine Company. Two boilers, one made by Woodruff & Beach, the other by Pacific Iron Works, Bridgeport. Has three boilers of a capacity of four tons per week; about 5½ tons of the raw material are used per week.

Rubber Manufactory, Julius Day. Commenced business in 1866; manufacture rubber pencils, penholders, &c., the building is of brick 200x50 feet, two stories high, and employ 100 hands.

Sylvester Smith occupies a 3 story building 114x46 ft. He manufactures all kinds of paper, except note. He also makes button boards. He employs 12 men, and produces 2,000 pounds paper daily. He runs 3 paper engines of 300 pounds each, a 48 inch cylinder and a 36 inch machine. The power is supplied by two 60 horse power water wheels, under 20 feet head. The main building is 100 x 200 feet, 4 stories; store house 50 x 100 feet, 1 story; rag house, 150x 100 feet, 1 story.

The Douglass Manufacturing Co. has two immense factories—one at Arlington, Vt., and one at Seymour, Conn. The former is in charge of Mr. N. R. Douglass, employs 150 hands and turns out $250,000 worth of mechanics' tools per year, including chisels and gauges of all kinds, calipers, dividers, brad awls, plane irons, campasses, drawing knives, &c., &c. The works at Seymour are superintended by Mr. Charles Douglass, employ 200 to 250 hands, and produce annually $350,000 worth of augurs, bits, gimlets, cork screws, squares, &c. The patent and exclusive right to manufacture Cook's boring implements are owned by this company. The aggregate production of these two factories exceeds that of all other similar establishments in the United States, and the quality of their goods is proverbially excellent, and having received merited recognition at the Paris Exposition in the shape of a medal. This triumph, won in the competition with the most celebrated edge-tool makers of England and the continental States, is something to be proud of. The spacious warerooms of the company, at 70 Beekman street, New York city, present a shining array of steel and polished iron that dazzles the eyes of the visitor. This branch of manufacture is constantly increasing in importance, with the growing demand for mechanics' tools. The Douglass Co. have aimed at perfection in the tools of their manufacture, and would seem to have approached it as nearly as it is possible for human skill to do.

Simsbury, situated on the Farmington river, 34½ miles from Northampton, and 41½ from New Haven, on the Canal Railroad. The village is principally on one street, running north and south, containing two churches, and has about 350 inhabitants.

SYLVESTER SMITH,

SEYMOUR, CONN.

Manufacturer of HARDWARE and MANILLA

PAPERS.

ORDERS PROMPTLY FILLED AT THE LOWEST CASH PRICES.

HORACE BELDEN, distiller of refined rye gin. The business was established by his grandfather, Thomas Belden, over 50 years ago. This distillery is 108x45, south wing 10x12, north wing 30x15, two stories; employs 5 hands, using 40 bushels grain per day, making 2,000 gallons per month. His motive power consists of 4 turbine wheels of 25 horse power combined.

TOY, BICKFORD & CO. commenced business in 1836, as manufacturers of patent improved safety fuse; their works consist of 12 wood and stone buildings, the principal ones are, 1st, the cotton factory, where they manufacture their own coverings for the fuse, it is 30x80, two stories, of wood; for running the machinery they have a 30 horse power breast wheel. No. 2, is their coiling house, 40x40, three stories. No. 3, machine shop, two stories, 24x30, stone; here they use a 25 horse power breast wheel, and a 20 horse power engine, with tubular boiler, built by Pitkin, Bros. & Co. They have two fuse shops, all built of stone, 24x60, 110x24, one story each. The remainder of their buildings are for store houses and powder magazines.

SOUTH COVENTRY, 35 miles from New London, and 65 from Grout's Corner, now Miller's Falls. A station in the town of Coventry, on the New London & Northern Railroad. The Wangombog a beautiful pond and the Skuugamug, Hop, and Willimantic rivers give this town a good water power. This town was the gift of Mohegan Sachem, and was first settled in 1700. The surface is uneven and the soil is a gravelly loam. This town is the birth-place of Captain Nathan Hale, who volunteered his services to Washington, to discover the position of the enemy on Long Island; the facts connected with this heroic act, are romantic, full of interest, and show the devotion he had for his country while his intended wife exhibited no less a nerve, when she knew of his execution, which took place September 22, 1776. His age was 22. This town is also the birth place of the late itinernant and eccentric preacher, Rev. Lorenzo Dow.

J. O. PITKIN occupies two buildings 20x54 and 30x70 ft. respectively, for the manufacture of cotton batts and wick. Employs 15 hands, and produces 250 pounds wick and 300 pounds batts per day The machinery is driven by water wheel, under a fall of 9½ feet. John M. Conway, agent in New York.

SOUTHINGTON, 54 miles from Northampton and 77 from New Haven, on the New Haven & Northampton Railroad. This village has a population of 1,500, contains 4 churches and 1 savings bank.

THE SOUTHINGTON CUTLERY CO., incorporated in 1868, for the manufacture of pocket cutlery and Smith's patent improved stocks and dies, with a capital of $50,000. R. A. Neal, President, John Gridley, Secretary. Their main building is 30x60 feet, 2 stories, with addition 30x50 feet, 1 story; forging shop 25 feet square, 1 story. This company employ 80 hands, and turn out about 31,000 dozen knives per year. The motive power is furnished from a 40 horse power steam engine with tubular boiler, made by the Pacific Iron Works.

J. B. SAVAGE commenced business in 1848. Manufacturer of carriage bolts, shaft couplings, &c.; turns out about 200 tons stock per year; employs 40 hands, and uses for motive power one of Woodruff & Beach's steam engines, of 40 horse power, his boiler was also made by Woodruff & Beach.

ÆTNA NUT CO. This company was incorporated in 1868, with a capital of $20,000. R. A. Neal, President; N. A. Barnes, Secretary, for the manufacture of machine forged nuts. Building 120x50, 1 story; employing 15 hands. Their machinery consisting of 8 machines for turning out nuts, with planer, lathes, &c., are driven by a 30 horse power engine with tubular boiler made by the Pacific Iron Works. They make 1 ton nuts per day.

PECK SMITH MANUFACTURING CO. Incorporated in 1853. Capital $150,000. R. A. Neal, President; M. W. Beckley, Secretary and Treasurer. This company manufacture all kinds hardware. Their main building is 240x40, 2 stories. The foundry building is 215x50, 1 story. For motive power they use one of the Corliss Steam Engine Co.'s 80 horse power engines, 2 tubular boilers made by Pitkin Bros. & Co. Their No. 2 foundry is 32x55, 1 story with forging shop attached 140x32, 1 story. Here they have a 45 horse power engine, flue boiler made by Pacific Iron Works. Their malleable iron works building is 40x50, 1 story wood shop for making boxes, turning, &c., is 30x80, 2 stories, ell 40x30, 1 story. Motive power in this building is a 45 horse power engine made by Pacific Iron Works and 2 tubular boilers, also made by the Pacific Iron Works. Employ 350 hands and turn out a large quantity of stock per month. Their brass foundry is 25x30, 1 story, where they make their own brass for their goods. The blacksmith's shop 75x60, 1 story, has 12 forges and 6 power forges or trip hammer forges. Power from main buildings.

SOUTH KENT, a flag station between Merwinsville and Kent on the Housatonic Railroad.

SOUTH LYME, 38½ miles from New Haven, 11½ from New London, 115 from New York, 117 from Boston. A country station on the Shore Line.

SOUTH NORWALK, see Norwalk.

SOUTHPORT, Fairfield County, 23¾ miles from New Haven, 52 from New York, 135¾ from Providence and 186 from Boston, on the New York & New Haven Railroad. This is a pleasant village and contains 3 churches, 2 banks, an academy, and public high school. It has a good harbor, and its tonnage is said to be larger in proportion to its size than that of any other port in the Union, amounting to 25,000 tons annually. Population about 12,000.

SOUTH WINDHAM, 26 miles from New London, 74 from Grout's Corner, 55 from Providence and 35 from Hartford, a station on the New London & Northern, and Providence, Hartford & Fishkill Railroads, in the town of Windham.

GUILFORD SMITH & CO. manufacture woolen feltings for paper makers. The business was established in the fall of 1864 by Guilford Smith. The factory, which is built of wood, is 75x35 feet and 3 stories high, having an L, also wood, 20x20 feet and 1 story in height. The employees number from 10 to 20, and they employ also quite a number of hands beside the regular mill operatives; they have 5 broad looms, 1 jack and 112 spindles, making felt from 36 to 96 inches, only to order, and requiring from 1,500 to 2,000 lbs. of wool per month. The power is furnished by 1 back-shot wheel of 28 feet, having 4 feet buckets.

SMITH, WINCHESTER & CO., established 1828, manufacturers of all kinds of paper machinery castings, agents for Jas. Leffel's patent water wheel; also agents and sole manufacturers of Jordan & Enstice's patent engine. The main floor of machine shop contains 10,132 square feet; the building is 3 stories high. They employ from 70 to 80 men, using 26 engine lathes for turning iron, 5 hand lathes for turning iron, &c., and 5 planers. They use water power to operate the machinery, having in all 55 feet fall of water; they have one overshot wheel, 28 feet in diameter, 5 feet length of buckets; also one wheel which takes the water after it leaves the first wheel, being 26 feet in diameter, 6 feet buckets. The manufactory is located 30 miles southeast of Hartford.

STAFFORD SPRINGS. This is a small manufacturing town, and composed of several small villages, there being about 2,500 inhabitants in the whole town. There are two mineral springs here, which have derived great reputation for the healing of many kinds of severe diseases. There is a large hotel which is always filled in the summer season with boarders, a large number of which are here to derive benefit from the springs and healthful atmosphere. It is situated 50 miles north-west from New London, on the New London & Northern Railroad. There are in the whole town 3 Congregational, 1 Methodist, 1 Baptist and 1 Universalist church; one bank only. The surface of the town is rough and in some parts mountainous, the soil coarse, hard and dry gravelly loam generally not very productive; watered by the Furnace and Willimantic rivers.

CONVERSVILLE COMPANY, B. W. Patten, Agent. This company was incorporated and established in1852; they manufacture fine doeskins. They occupy 4 buildings of the following dimensions: the main building, which is built of stone, is 115x36 feet, 4 stories and a basement; one wooden building 100x30 feet, 2 stories and basement; finishing building 100x28 feet, 2½ stories, and picker house, which is built of stone, is about 40 feet square and 2 stories. They employ 75 hands, running 68 looms, 7 jacks, and requiring 1,000 lbs. of wool per day, which makes about 1,000 yards of goods in the same time. The power is derived from a 22 feet overshot water wheel. There is also a fine 40 horse power engine ready to be used in case of necessity. Capital $30,000; these mills are pleasantly situated on high ground commanding a fine view, and are about half mile from the depot.

GRANITE MILL COMPANY, commenced the manufacture of sheetings and cotton cloth in 1843. They occupy a granite building 130x40 feet. Employ 100 hands and produce 1,300,000 yards sheetings yearly. They run 5,000 spindles and 120 Mason's looms, and use water power, having a fall of 27 feet. The water wheels are 25 feet in diameter. They consume 360,000 lbs. of cotton yearly.

STAFFORD LOOM CO. are the exclusive builders of the celebrated Stafford loom, R. W. Andrews patent. These looms have been in successful operation for seventeen years in nearly every State in the Union, and is the only genuine Stafford loom. The business was established in 1866. They occupy a building 120x34 feet, and employ 25 hands. They use water power having a fall of 15 feet and one 36 inch Cushman wheel.

STAMFORD, Fairfield County, 39½ miles from New Haven, 37 from New York, 151½ from Providence, and 199 from Boston, on the New York and New Haven Railroad.

This beautiful village is about half a mile north of the station, and is finely laid out, having wide shady streets, and fine drives. It is a noted summer resort, many wealthy citizens of New York reside here. Its Indian name was *Rippowams*, and it was purchased of the natives for "twelve coats, twelve hoes, twelve hatchets, twelve knives, two kettles, and four fathoms of white wampum." The soil of Stamford is a rich gravelly loam, well cultivated and very productive. The surface is undulating, presenting a great variety of delightful prospects. It is well watered by the Stamford or Trone River, and the Micanus River which runs through the western part of the town. A canal has been cut from the Sound up to the village; crossing this canal is a bridge built of stone and arched, from which is a fine view of the Sound is afforded.

This place was the residence of Hon. Abraham Davenport, for many years one of the counsellors of the colony, and afterwards of the State. He was the son of Rev. John Davenport, the second minister of Stamford, and grandson of Rev. John Davenport, the father of New Haven Colony. Mr. Davenport was distinguished for his vigorous mind, Christian integrity, and for his uncommon firmness of character. An instance of his firmness is here quoted:

"The 19th of May, 1780, was a remarkably dark day; candles were lighted in many houses; the birds were silent and disappeared, and the fowls retired to roost. The Legislature of Connecticut was then in session at Hartford; a very general opinion prevailed that the day of judgment was at hand. The House of Representatives being unable to transact their business adjourned. A proposal to adjourn the Council was under consideration. When the opinion of Mr. Davenport was asked he answered: I am against an

adjournment. The day of judgment is either approaching, or it is not; if it is not, there is no cause for an adjournment; if it is, I choose to be found doing my duty. I wish, therefore, that candles may be brought."

HARDING, SMITH & CO. commenced the manufacture of fancy cassimeres, chinchillas, cloakings, and silk mixtures, in 1868, as successors to T. S. Hall, the business being formerly carried on some six years. The main building of 230 x60, three stories, built of wood, with dye house, boiler house, &c. attached. The motive power is furnished by an 85 horse power Corliss engine, 3 boilers. They run 10 set, and 40 broad Thomas looms, that number being more than the regular proportion for the number of cards used. This company employ 160 persons, use 325,000 lbs. of wool per year. The weekly production being 6,000 yds. of fancy cassimeres. The mill is located in the western part of the village, on Mill river. A double Leffel water wheel has just been put in, having a capacity of 50 horse, the fall being 9½ feet. John A. Smith, one of the firm, was formerly in similar business in Burrillville, R. I. The firm is Wm. C. Harding, John A. Smith, and John J. Shaw.

THE PHŒNIX COMPANY occupy a main building 165x35, used for a wareroom, painting and trimming rooms, also, another building 40x60. This company manufacture carriages; employ 35 persons, and do a business of about $65,000 per annum; they commenced in 1850. The company is J. B. Reed, B. U. Lyon, and E. P. Whitney. J. B. Reed is the agent.

J. D. WARREN & CO., manufacturers of stoves, hollow ware, machinery, &c., commenced here in 1851. They occupy a building 71x145, 1 story, another, 50x65 used for storage and office. A storing building 64x90, with numerous other buildings, the whole works covering about one acre. They employ 50 persons, and melt 5 tons of iron daily. J. B. Schofield, I. Wardwell, and J. D. Warren, are the proprietors.

THE STILLWATER COMPANY established business in 1835, and manufacture round and square rods, carriage bolt rods, nut iron, lock spindle wire, &c. They employ 60 hands produce daily 7 tons, and do a business of $300,000 yearly. They have an engine of 85 horse power; are located on Mill River, and have 20 feet fall of water.

STEPNEY, 10 miles from Bridgeport. A village containing 1 church and 200 inhabitants, on the Housatonic Railroad.

STERLING, 29¼ miles from Providence, 60¾ from Hartford; a country station in the town of Sterling, on the Providence, Hartford & Fishkill Railroad.

STONINGTON, 12½ miles from New London, 49½ from Providence, on the Stonington and Providence Railroad, 138 from New York and 94 from Boston. The village is on a narrow point of land extending about half a mile south into the Sound. The harbor is protected by a massive breakwater of granite, constructed by the U. S. Government. The Wadawannuck Hotel is a summer resort occupying an entire square in the centre of the village. This is the eastern terminus of the Stonington line of boats for New York.

A. B. MILLER, occupies a building 60x40, near the water on the wharf for the manufacture of all kinds of castings generally. Employs 2 persons with intention of increasing to 10. Mr. M. commenced business in 1868.

THE STANDARD BRAID CO., located near the light house in the south part of the town, was incorporated in 1866, with a capital of $200,000. Occupy a stone building 3½ stories 108x50 with ell 60x50, and addition 66x32, 2 stories. Employ 125 persons; running 300 braiding machines of American make, with a full set of English combing, drawing and spinning machines; use up 180,000 lbs. of wool, and make 22,500,000 yards of braid per year. An engine of 70 horse power runs the machinery.

STONY CREEK, 11 miles from New Haven, 39 from New London and 87 from New York, on the Shore Line Railroad; a small harbor in which are productive oyster grounds, is located here. The "Thimble Islands" are visited much in the summer, being only a few rods from the main land. This is the paradise of sportsmen during the autumn months; a great many ducks flock here at this time.

STRATFORD, 14 miles from New Haven, and 62 from New York, on the New York and New Haven Railroad. Settled in 1639. Indian name Cupheag. A station and town by the same name. The town is mostly level and free from stone; rich meadows bordering on the river and harbor. The principal street is one mile in length, running parallel with the Housatonic, at the mouth of which the village is located. General David Wooster was born here in 1711.

TALCOTTVILLE, 11½ miles from Hartford, 78½ from Providence, a flag station on the Providence, Hartford and Fishkill Railroad. This village contains one church and about 200 inhabitants.

TALCOTT BROS. commenced the manufacture of meltons and satinets in 1856, being successors to N. O. Kellogg. They run 2 mills, 72x40, 3 stories, with L, used as a dye house, 200x40 and 24, 1 story; another mill 100x32, 3 stories; employ 60 persons. A breast wheel, 12x15 and a 4 foot turbine wheel, supplies the power, the fall being 10 and 12 feet; situated on the Taucanhoosen River. The mills run 4 sets of woolen machinery and 32 looms; consume 600 pounds of wool per day and produce 1,000 yards.

TARIFFVILLE, is situated on a Branch road, about 1 mile from the Canal Railroad, connecting with the main road about 1½ miles below Granby, containing 400 inhabitants and 3 churches.

TERRYVILLE, 22 miles from Hartford, 10½ miles from Waterbury village, and 1 mile west of depot. Population about 500; on the Providence, Hartford and Fishkill Railroad.

EAGLE BIT AND BUCKLE CO. Incorporated in 1866, with a capital of $40,000, is situated ½ mile east of depot. Occupy building 80x30, with ell 80x30, 3 stories, also building adjoining 70x30, 1 story. Employ 40 hands; use an 80 horse power turbine wheel. A. Terry, President, T. N. Baldwin, Treasurer and Secretary.

ANDREW TERRY & CO. manufacture malleable iron castings. Commenced business in 1848. Foundry situated ¼ mile west of depot. Building 380x45, one story. Employ 50 hands; consume 300 tons of iron, and 600 tons of coal

per year; produce 600 tons of malleable iron castings per year. Use 10 horse turbine wheel.

Wm. Wood & Co., manufacturers of pocket cutlery, commenced busines in 1867; situated half mile west of the depot; building 30x40 feet, 3 stories. Employ 30 hands; was formerly of Waterville, Ct.

Eagle Lock Co., established business in 1832, for the manufacture of cabinet and trunk locks and keys. They occupy 2 factories, the first is 100x40 feet, 3 stories, second 100x36 feet, with L 50x35 feet, and L 40x35 feet, all 3 stories, besides iron house 80x24 feet; baking room 40x24 ft. and office and packing rooms 90x40 feet, 2 stories. They employ 220 hands, and make a yearly sale of about $450,000 worth of the above named articles. They use water power mostly, but have 2 steam engines for use when water fails. The engines were made, one by Hewer & Phillips, of Newark, and one by Woodruff & Beach, of Hartford, 40 horse power each. The factory is located on Pequabuck river; have 2 water wheels of 20 feet fall each. They manufacture 450 different kinds of locks, and finish about 15,000 locks each working day.

THAMESVILLE, a flag station on the New London and Northern Railroad, one mile from the city of Norwich. The present name has been recently given it, the former name being Cold Spring. Post Office address, Norwich.

Mitchell Brothers & Co., manufacturers of iron, as follows: Round, half-round, oval and half-oval, band, hoop, scroll Uncas horse-shoe shapes, and various other descriptions of iron, to order. The main building is 129x80 ft., of wood. Attached to it is an engine house 14 x 80 feet. Office, 18 x 25 feet, of wood; store house 30 x 50 feet. There are two engines used, the larger being of 100 horse power, and the smaller of 30 horse power, the two having 6 cylinder boilers 30 feet by 30 inches. There are 3 sets of rolls, and 3 furnaces, using 2,000 tons of scrap iron per year. Thomas Mitchell and his sons, John and Thomas, commenced the present business in the year 1845. Mr. John P. Hunt was also associated with them as partner. The present company consists of John Mitchell, George Coit and A. W. Gibbs.

Thamesville Iron Works. Post Office address, Norwich. This company was incorporated in 1863, with a capital of $20,000, for the manufacture of merchant bar iron. The main building is 90x125 feet, 1 story, of wood, with an L 40x40 feet. The employees number 40, turning out about 145 tons per month, and running 3 furnaces and 2 sets of rolls. Two steam engines—one of 100 and the other 40 horse power—furnish the necessary power. There is also 1 of Harrison's celebrated non-explosive cast iron boilers, of which the company speak in the highest terms. There are also 3 ordinary flue boilers, each 24 feet long and 4 feet diameter.

THOMPSON, 23¾ miles from Worcester, 36½ from Norwich. A station and town on the Norwich and Worcester Railroad. West Thompson, a village containing several churches, is situated about one mile west of the depot. The French river meets the Quinebaug near the centre of the town, and Five Mile river issuing from several ponds, waters the eastern part. The Indian name of the town is Quinnetessett.

THOMPSONVILLE, the largest town between Springfield and Hartford, being 9 miles from the former and 17 miles from the latter city, and 129 miles from New York. It is situated on the left bank of the Connecticut River, and on a clear day can be seen for miles around; has a population of nearly 3,000 and 5 churches. Situated on the New Haven, Hartford and Springfield Railroad.

Enfield Manufacturing Co., incorporated in 1845, capital $100,000, Wm. Hoge, President; William L. Hoge, Treasurer; S. J. Weston, Superintendent, manufacturers of shirts and drawers, running 15 sets woolen machinery. Motive power 125 horse Woodruff & Beach engine. They have 6 flue boilers, also made by Woodruff & Beach.

Hazardville Bonnet Co., incorporated 1866, A. D. Bridge, President; Wm. Gordon, Secretary. They occupy 3 buildings, the main building being 30x44 feet, 3 stories; employ 25 hands, manufacturing Shaker goods, doing a business of $25,000 per annum.

TOLLAND & WILLINGTON, 44 miles from New London, and 56 from Grout's Corner, (now Miller's Falls.) A station on the New London and Northern Railroad, for the convenience of the inhabitants living in the towns of the same name. The land of both is rather sterile, mountainous and uneven.

TOLLES, 25 miles from Hartford and 7½ from Waterbury. A country station on the Providence, Hartford Fishkill Railroad.

UNION CITY, 30 miles from Bridgeport, on the Naugatuck Railroad. A small village of about 800 inhabitants.

Tuttle & Whittemore, commenced business in 1857. Manufacturers of malleable iron. Foundry situated opposite depot and consists of 4 buildings, 1st, 250x50, 1 story, two wings 60x45, and 70x30, moulding; 2d, 90x45, 1 story, packing room and store house; 3d, 30x20, 1 story, pattern room; 4th, office is connected with depot. Use a 20 horse power Woodruff & Beach engine, boiler made by Pacific Iron Works. This firm turn out 50 tons malleable iron castings per month.

M. Terrel commenced business 1868, manufacturing buttons, employs 12 hands; building 60x25 with ell 50x20, 1 story, using 150 pounds ivory, and turning out 40 gross buttons per day. Six horse power turbine wheel.

E. F. Smith commenced business 1868, successor of A. Smith & Son, who commenced business 1858, manufacturer of ivory, bone and horn buttons; building 75x18, 1 story, 2 wings 15x12, 1 story. Employs 20 hands, using 5 tons stock per month, and turning out over 200 gross per day. Uses a 12 horse power turbine wheel.

Godfrey & Terrel commenced business 1866. Manufacturers of brass, German silver and steel thimbles; 80x40, 2 stories. Employ 20 hands; turning out 100 gross thimbles per day, and using about 2,000 lbs. stock per month.

G. L. Smith commenced business 1853. Button manufacturer. Employs 20 hands and uses about 500 lbs. tin, 200 lbs. brass, 150 lbs. white metal and turns out over 300 gross buttons per day. His building is 60x20, 2 stories. Power derived from a 10 horse overshot wheel.

Naugatuck Machine Co., incorporated 1852. Capital $18,000. J. L. Esbell, President; E. Smith, Secretary. Manufacturing mill gearing, woolen and button machinery, presses, drops, &c., building 130x40, 2 stories. Employ 16

hands; using 150 tons of iron, &c., per year. Power used 20 horse overshot wheel.

Union Knife Co. incorporated in 1850; capital $30,000. J. A. Peck, President; E. B. Mallett, Secretary; building 100x24, 3 stories, ell 40x24, for the manufacture of pocket cutlery. Employ 125 hands, using 50 lbs. steel per day and turning out 3,000 dozen knives per month. This company use a 30 horse power wheel, and 20 horse steam engine, flue boiler.

Connecticut Cutlery Co. incorporated 1866; capital $24,000. H. Twitchell, President; L. D. Warner, Secretary and Treasurer; manufacture cast steel shears and pocket cutlery. This company manufacture Twitchell's celebrated patent knife. Their works as follows: 1st, 120x40, 2 stories, making handles, &c. 2d, 22x30, 1 story, forging and wood house. 3d, 14x20, 1 story, japanning for shears. 4th, 16x22, 1 story, office and packing room. Employing 60 hands, using about 3,500 pounds stock, and turning out about 700 dozen knives and shears per month.

Union Village, situated on the Farmington River, 6 miles from Plainville, 33 from New Haven and 5 from Collinsville, on the Collinsville Branch. Union village contains about 800 inhabitants and 3 churches.

Cowles Paper Co., established 1868, L. Richardson, President; George Dunham, Secretary and Treasurer. They occupy 1 main building 45x60 feet, with an L 47x27 feet; machine room 22x72 feet, with boiler house and sizing room, 18x45 feet. They employ 17 hands, use 3 engines and 1 machine, consume about 650 tons stock and chemicals, and produce about 350 tons Manilla paper per annum. The power is furnished by a water wheel under 18 feet fall.

Vernon, 77¾ miles from Providence, 12¼ from Hartford, on the Providence, Hartford & Fishkill Railroad. The Rockville Branch joins the main road here. The Hockanum and Tankerooson or Tancanhoosen rivers water the town.

R. B. Parker occupies a mill near the depot for the manufacture of cotton warps, commenced here in 1866. The mill was built in 1853, 108x32 feet, 2 stories and attic; employs 15 persons, and consumes 200 pounds of cotton per day; runs 800 spindles, 2 speeders and 6 spinning frames. A 22x16 breast wheel supplies the power; located on the Tancanhooson river with a fall of 22 feet.

Phœnix Mills were incorporated in 1867 with a capital of $25,000. M. S. Fuller, President, T. Tyler, Agent, Secretary and Treasurer. The mill is 100x34 feet, 3 stories, wood, with L 75x29 feet, 2 stories, basement of stone. Run 1,400 spindles; consumes 1 ton of cotton, and produces 1,600 pounds of satinet and cotton warps per week, No. 20 yarn. The mill is situated on the Tancanhoosen river ½ mile from the depot, the fall being 18½ feet. The power is supplied by an 18x17 breast wheel; employs 23 persons.

Wolcottville, 52 miles from Bridgeport. A small manufacturing village, with a population of about 2000 on the Naugatuck Railroad, increasing very rapidly; located in the town of Torrington. The surface of this town is quite uneven, the soil is adapted to grazing; two branches of the Naugatuck river meet at Wolcottville. This village is situated in a valley, and owes its rise principally to Oliver Wolcott, who was Governor of Connecticut, in Revolutionary times. (See Litchfield.)

Redfield & Rice Manufacturing Co. Incorporated 1852, capital $300,000, for the manufacture of spoons, knives, and forks, (they also have a large mill at Brooklyn, New York, where they manufacture all kinds of table silver ware.) Their building is 125x30, 3 stories, employing 60 hands and manufacture 10,000 dozen spoons, knives and forks per month, using 20,000 pounds silver and German silver. Power, overshot wheel, 40 horse. E. W. Sperry, Superintendent at mill, James Rice, Secretary and Treasurer, J. H. Redfield, President. Office 4 Maiden Lane, New York.

Coe Brass Manufacturing Co., established 1863, with a capital of $205,000, for the manufacture of brass, German silver and brass wire, P. F. Parsons, Treasurer; L. W. Coe, President. Their rolling mill is a 1 story stone building, 90x100: wings, also built of stone, 39x110, 2 stories, where they manufacture wire rivets; 46x50, 1 story, copper rivets and burs; 117x32, 1 story, casting and scrap work; 20x44, 1 story, rolling room; office, also built of stone, 24x32; employ 75 persons. The power consists of one 75 horse power turbine and one 150 horse power overshot wheel. This company also own the Wolcottville Manufacturing Company, incorporated 1864, and employs 25 persons, using 100 lbs. copper, turning out about 1,000,000 percussion caps per day. They occupy 4 buildings—1st building, manufacture of caps, 40x30, 2 stories; 2d building, charge rooms for caps, 30x25, 1 story; 3d building, powder house, 30x20, 1 story; 4th building, office, packing room and box shop, 30x30, 2 stories. They use a 25 horse power turbine wheel to drive their machinery.

David Vaile, carriage manufacturer of all kinds, commenced business in 1854, and now employs 12 persons and makes about 100 carriages per year. His buildings consist of engine house, wood-work and painting shop 60x40, 2 stories; engine, J. C. Hoadley's make, 10 horse power; blacksmith and trimming shop, 50x25, 2 stories; storehouse, 40x20, 2 stories.

Turner, Seymour & Judd, manufacturers of brass goods. Office, 64 Duane street, New York. R. L. Smith, Secretary and Treasurer; E. Turner, President. E. M. Judd, Superintendent at mill. Capital $160,000. They occupy 8 buildings, which are as follows, viz.:

Building No. 1, 140x40 ft., 1 story, iron foundry, 40 horse power turbine wheel; No. 2, 80x45, 3 stories, finishing shop for iron goods, L's 30x25, 2 stories, 30 x 25, 3 stories; No. 3, 80x25, 3 stories, paper box manufactory, packing room and office; No. 4, 30 x 30, 1 story, brass foundry, 20 horse power turbine wheel; No. 5, 50x25, 1 story, finishing and cleaning; No. 6, 100 x 40, 3 stories, manufactory of brass goods, this and No. 5 have a 30 horse power turbine wheel; No. 7, 25 x 30, 1 story, japanning, &c.; No. 8, 40 x 20, 1 story, blacksmith and carpenteriug.

They use about 9 tons brass, 25 tons pig iron and 2 tons iron wire, &c., and ship about 28 tons iron and brass ware per month.

Union Manufacturing Co. Capital $50,000. Incorporated 1845. F. N. Holley, President; R. Holley, Agent; J. B. Rose, Superintendent. Four set mill; employ 65 hands. Size of mill, 120 x 40, 5 stories, including attic; dry and boiler house 100x24, 50 horse power engine of Putnam Machine Co.'s pattern, tubular boilers; also, 2 turbine wheels of 60 horse power. Office, store house and sorting room, 100 x32. This mill uses about 150,000 lbs. wool, and turn out about 140,000 yards fine ¾ doeskins per year.

Waldos, 51¼ miles from Providence, and 38¾ from Hartford. A country station on the Providence, Hartford and Fishkill Railroad.

WALLINGFORD. A village of 2000 inhabitants; settled in May, 1668. The depot being located on the plain, one-eighth of a mile from the centre of the place. The village is built on two parellel streets, which are shaded by fine elm and other ornamental trees. The Beach House, a summer resort, is situated here in the centre of the place. The other hotel is kept by Dwight Hall, and is one of the oldest in the State. At this house Gen. Washington stopped Oct. 18th and 19th, 1789, then kept by Jeremiah Carrington. The village is the centre of a fine farming district and commands an extended view of the surrounding country. Situated 12 miles from New Haven, 24 from Hartford, 86 from New York, on the New Haven, Hartford and Springfield Railroad.

The works of WALLACE, SIMPSON & Co. are located about a quarter mile west of the depot, in a brick building 160x35 three stories, built in 1867. They employ 80 persons for the manufacture of spoons and forks. The power is furnished by 2 Kilbourn, Lincoln & Co. water wheels, 7x9 feet in diameter respectively, the fall being 9 feet. This company use 30,000 lbs. of metal per month; all of their ware being taken by the Meriden Britannia Co. for whom they are manufactured.

GAYLORD BROS. commenced here the manufacture of gimblets and boring tools in 1864. The building is about 30x50, 2 stories. Employ about 15 persons. The power is furnished by a 24 feet breast wheel, the fall being 21 feet, located on Waterman's Brook, a branch of the Quinnipiac, about one mile from the depot east.

MR. CAMPBELL, manufactures cork screws on the same stream employing 3 persons in a building 20x30.

THE POMEROY MANUFACTURING CO. was incorporated in 1856, with a capital of $15,000 for the manufacture of buttons of every variety. The manufactory is located about ¾ mile from the depot east, covering about ½ acre. The power is furnished by an overshot wheel, the fall here being 16 feet. The stream is called Waterman's Brook. This company do a business of $20,000 per year. L. Pomeroy, President; F. Miller, Secretary and Treasurer.

SIMPSON, HALL, MILLER & Co. were incorporated July, 1866, with a capital of $125,000. Samuel Simpson, President, Gurdon W. Hall, Secretary, Friend Miller, Treasurer. They occupy a main building 30x114, 4 stories, built of wood, another 50x24, 3 stories, used as an office and packing room, one 80x28, 1 story, for castings, and work shop, and other small buildings. This company employ 130 persons; the manufactory is located on Waterman's brook, from which they obtain water to drive their machinery. The wheel used is a 24 feet breast, with a fall of 21 feet. This company manufacture all grades of silver plated and Britannia ware, using 3 tons of metal per month and 800 ounces of silver. The annual production being $225,000.

ELIHU HALL & Co. were incorporated January, 1864, for the manufacture of carriage wheels, spokes, hubs, &c., with a capital of $15,000. E. Hall, President; E. H. Ives, Secretary and Treasurer. This company are successors to E. Hall & Sons, who commenced here in 1856, the business being previously established by the father in 1835. The main building is 40 x 80, 3 stories, built of wood, with an addition 30x50, 2 stories. A 25 horse power engine, made by M. & T. Sault Mfg. Co., New Haven, supplies the power for the shop. This company manufacture about 400,000 spokes and 2,000 sets of wheels per year. They are the only manufacturers of Warner's patent wheel, which they claim to be superior to any other, being light and serviceable. The works are located near the depot, and can be seen from the cars of the Hartford & New Haven Railroad.

WAREHOUSE POINT, situated on the left bank of the Connecticut river. The village is about a mile below the depot, opposite Windsor Locks. A ferry boat plies between these two villages, carrying whatever freight or passengers that may want to cross.

Warehouse Point is situated 13 miles from Springfield and Hartford, and 125 miles from New York, on the New Haven, Hartford and Springfield Railroad, has a population of about 1,200, and 3 churches.

BROAD BROOK CO. is located at the village of Broad Brook, 4½ miles from this station. The mill is 275x44 feet, 4 stories, built of stone, with boiler room and dry house attached, 150x44, and a dye house 120x35. The power is furnished by a breast wheel and a 150 horse power engine, built by Woodruff & Beach, with 3 boilers, 2 of them return flue and 1 tubular. They manufacture about 30,000 yards of fancy cassimeres per month; employ 200 persons, and use 40,000 lbs. wool per month. The mill contains 13 sets of woolen machinery. This company own about 100 tenements, being most of this village. Office of the company, 209 and 211 State street, Hartford. Incorporated 1849, with a capital of $200,000. H. Blanchard, President; B. Hooker, Treasurer; C. J. Burnell, Secretary.

WATERBURY, 32½ miles from Hartford, at the terminus of the Providence, Hartford & Fishkill Railroad, and on the Naugatuck Railroad. Waterbury is situated in a valley which is washed by Mad river on the east and the Naugatuck on the west; the central part is about a mile in breadth. On either side hills gradually rise to a considerable elevation, presenting to the eye the galleries of an amphitheatre, the place forming an area. A beautiful square is situated in the centre of the place, shaded by ancient trees and presenting an inviting appearance.

The number of polls is 1,521; the poll tax $1.00. The amount of taxable property in 1868 was $6,900,005; the number of voters about 2,500. There are 7 churches, 4 banks, 4 hotels, and a public library, called the Bronson Library, founded on a legacy of $200,000 donated to the city for a library by Silas Bronson, of New York.

We quote from the *Boston Commercial Bulletin*, to whom we are indebted for many valuable statistics and much valuable information.

"When the traveler alights for the first time from the cars at Waterbury, Connecticut, and steps upon the platform of the depot—a building, by the way, of marked architectural tawdriness, he hears a sound he never heard before. Through the hissing of steam, the rattle of brakes and clatter of feet, there comes to his wondering ears *cla-a-a-ng*—a deep bass sound, tapering off in a low contralto. Scarcely have his ears attained that perpendicularity supposed to be expressive of intentest listening, when *cla-a-a-ng*—it comes again, this time from another direction. Looking up the track, the mysterious clangor assails him from a mass of great brick structures; looking down the track it assails him from another mass of great brick structures. Musing and mystified, he gets into a waiting hack and is driven to the hotel; but the clangor rides behind his carriage as Dark Care sat behind the horseman, and as he emerges and mounts the steps of the Scovill House, the last sound that reaches him ere he passes the threshold is *cla-a-a-ng*. Is it a haunted city? he wonders. Has Vulcan set up a forge in the great hills that surround it? Or have Hendrick Hudson and his crew taken to playing bowls in this pleasant valley of the Naugatuck?

Presently his solicitude is relieved. He is told that it is only brass, an explanation with which, for the moment, he is compelled to content himself. "Brass," he knows, makes a good deal of noise in the world, but he never heard of its making a noise like this. This clangor is the voice of Waterbury, and it is heard from one end of the Union to the other. It is not musical to the common ear; but to the people of that lovely little city it is as sweet as the strains of "The Mother's Prayer" dropping from Ole Bull's violin. Surely, the body with such a voice must be worth seeing.

Brass is the life of Waterbury; but for it the city would be no city, and its name would cover a feeble and straggling village. Naturally the people respect brass. Brass the material is meant, not brass the ideal. For, though the great poet says that "men's evil manners live in brass," this is not true of Waterbury, where manners are silvern rather than brazen. So much material brass, it would seem, enables the inhabitants of Waterbury to dispense with the ideal and more popular article, and in consequence, they constitute a community in which modesty seems to be regarded as a real virtue, and not a trumpet blown for individual laudation. What is not made of brass here it would be easier to tell than what is. You hear it, smell it, see it, feel it everywhere; in the button on your military cap, in the burner of your lamp, in the pin which you stick in your collar, the stairs of your hotels and public buildings are plated with it; your chair is mended with it; Bridget in the kitchen pushes her clumsy needle with it; it is the brazen age in Waterbury.

And here is a good place for saying a word of deserved eulogy upon this city and its people, so far as their characteristics can be appreciated during a brief acquaintance with them. A neater, more orderly, and, in all respects, agreeable city does not exist in all New England. Nature has done much for it in the gift of two pretty streams—the Naugatuck and the Mad—that dart through the valley where it lies; but the public spirit of its people has done more. To the latter are due the well-kept streets, the handsome public buildings, the cosy park, rescued from the damp destiny of an alder swamp, the lofty, spreading trees that shade its thoroughfares, the cemetery so alluring in its simple, neatly rural beauty, that one almost longs to lie down in it and be at rest beneath the shimmering leaves, and amid the rustle of flowers and the song of birds; and the water works, built last year, at a cost of nearly $200,000. One accounts for this unusual public spirit mainly by the fact that the factories—which constitute the wealth of the place—are almost wholly owned by residents, who feel a personal pride in the welfare and beauty of their city. How all this beauty and comfort and solid prosperity have been rolled out of brass, we shall try to show.

Waterbury lies on the Naugatuck river, on the Hartford, Providence & Fishkill Railroad, and Naugatuck Railroad. It is distant about 33 miles from Hartford, 94 from New York,—and this latter remoteness constitutes its principal disadvantage—about 160 from "the Hub." It numbers 15,000 souls, and a busier, happier community is nowhere gathered within municipal limits.

It is a child, 212 years old, by the way of Farmington, Conn. In 1657, some adventurous Farmingtonians wandered off to seek their fortunes and perhaps to found an empire. Halting near the site of Waterbury, they decided to remain, but they reckoned without their Indians, for these gentry were so sedulous in their attentions that the colonists could not render an adequate return. So they moved across the river and established their household gods about the spot where now a handsome brown stone City Hall rears its imposing front (about which structure it may be said, as of the Boston City Hall, that it is so hedged about with other buildings that one must go up in a balloon to get a fair view of it.) But they did not thrive very well. They were simply farming folks, dependent on Mother Earth for sustenance and employment; brass foundries and copper stocks were unknown in those days. But Mother Earth did not treat them very well. The soil was poor and they knew not how to improve it. But, with true Yankee pluck, they toiled along, year after year, "making both ends meet," only by a vigorous final jerk. They grew little in number and none in wealth. At the end of a hundred years their descendants were hardly better off than themselves. Until within sixty years the poverty of Waterbury was a proverb: "poor as Waterbury," said her more fortunate neighbors, half pitiful, half-derisive.

The earliest manufacturing enterprise, of which the records of Waterbury give any account, was conducted by Lieut. Ard Welton, who made a few guns during the Revolution. In 1790, James Harrison began to make wooden clocks, shoe heels, reels, &c. He did not do a strictly cash business, it appears, for, in the account of Capt. Sam. Judd, a taverner, that gentleman stands indebted to one clock, £4, and credited with 1 gin-sling, 7d., and one load of wood, 2s. 6d. But this miscellaneous business was the germ whose due development came in *time*, and Waterbury has now two extensive clock factories, in which almost every part of the work is done by machinery—the clocks being made of brass, of course. About 1800, Harrison built a water wheel, the first ever used in the town. His mill property passed through several hands—none of which made it profitable—and finally came into possession of the American Suspender Company, which established in 1843, has built up an extensive and prosperous business.

But Waterbury, more truly than any other community, may affirm "on Fortune's cap we *are* the very button." She has sprung from a button. Her coat of arms should be a *bouton d'or*. But for buttons she would have had no brass, and without brass, the proverb "poor as Waterbury," might have been current to this day. Who made the first button in the town, is yet an open question, and probably will always remain open. History gives the credit to Samuel and Silas Grilley, who flourished prior to 1800; but she supplies no particulars. Tradition says that some man, whose name has not been handed down, being too poor to buy buttons, for his own clothes, made some in a rude way. But only the bare record of his deed remains. It is known, however, that the first metal buttons made were cast in pewter moulds; eyes of the same material were used for a while, but soon eyes of wire replaced them. In 1802, Abel and Levi Porter, Daniel Clark and Silas Grilley, began to make gilt buttons, employing 8 or 9 hands, and using $3 worth of gold in gilding a gross of buttons. They used to carry ingots of brass to Litchfield to be roll in an iron mill. In 1808, David Hayden became a partner in the firm, and soon after, they bought an extensive mill property, and for the first time used water power in the manufacture of buttons.

In 1811 there came on the stage a man who, for half a century, was one of Waterbury's most active, able and honored citizens. A man of large intelligence, shrewd foresight and comprehensive views, he thoroughly appreciated the resources and needs of his town; he saw that her only road to success lay through manufactures. His name was James M. L. Scovill. In 1811 he, his brother, W. H. Scovill, Frederick Leavenworth and David Hayden began the manufacture of gilt buttons. They bought an old mill property, and thereby hangs a tale.

In the deed of conveyance from the town, or the original proprietors, there was a stipulation that a public grist mill should always be maintained on the property. Years passed away after the purchase, the business of the Scovills and their partners had reached enormous proportions, and where once a rude little mill ground the scanty grists of the neigh-

boring farmers, rose immense structures of brick, crammed with machinery and noisy with the voice of steam and the clangor of metals. The former existence of a grist mill on this spot was as generally forgotten as was the fact that Lieut. Ard Welton had made guns in the town three-quarters of a century before. But suddenly, on the information of certain old gentlemen, with a liking for litigation and antiquarian investigations, the owners of this great manufacturing establishment were summoned into court, charged with a breach of the covenant in their deed, by which they were bound to maintain a public grist mill. The whole community was amazed and alarmed; what could the Scovills do, they wondered; would they have to give up the property, or would they escape with a heavy pecuniary mulct? The public suspense was not long. Mr. Scovill (J. M. L.) promptly came into court and made answer that they had always maintained a public grist mill in accordance with the covenant on the deed, and if the public had any grists to grind they had only to bring them to mill. Then accompanying the old gentleman who had instigated the action, and certain representatives of the town, to the great shops, he had a piece of the flooring lifted up and showed them a pair of mill-stones in perfect order, and ready to run upon demand."

MANUFACTURES.

Scovill Manufacturing Co. Warehouse, 4 Beekman street, and 36 Park Row, New York. The ground occupied by the main buildings has been used for manufacturing purposes ever since the settlement of the town, about the year 1680, the privilege then being used for the first corn mill ever erected in Waterbury. The business of the present establishment dates from the year 1811—58 years ago, when Frederick Leavenworth, David Hayden and James M. L. Scovill, there commenced the manufacture of buttons, under the firm style of Leavenworth, Hayden & Scovill. In 1827 the firm was changed to J. M. L. & W. H. Scovill, brothers, and so continued until 1850, when the Messrs. Scovill admitted some of their employees to an interest in the concern, forming a corporation under the name of the Scovill Manufacturing Company.

Here are made innumerable varieties of goods included in the business of rolled brass, German silver, zinc, etc., the standard specialties being metal and cloth buttons, (which occupy two distinct factories,) kerosene lamp burners, brass hinges, brass and German silver thimbles, photographic materials, metal blanks, etc., all of which are being continually made; while of other styles of goods the number is, as we have said, countless, because comprising daily accumulating new inventions, sent hither to be manufactured from the above named materials, and endless in variety of purposes, styles, shapes and sizes.

In all the departments about 300 operatives, of both sexes and all ages, are employed, their wages ranging from $3 a week to $6 and $8 a day,—machinists, the most expert, commanding higher wages than artisans in other departments. As a rule, the 10 hour system is observed, although in some branches the work is done by the piece, and the time is varied.

As an instance of the magnitude of the business we will state that the annual sales amount to about $1,000,000; and from $300,000 to $400,000 worth of stock is usually on hand. 1,000 tons of coal and 2,000 cords of wood are consumed in a year. Of copper, 600,000 lbs., and of nickel, zinc, and other metals. 400,000 lbs., are used up annually, in the manufacture of brass, or other articles—large quantities of zinc being employed in the manufacture of patent fruit-jar covers, at the rate of many thousand gross in a year. The cost of new tools and machinery, repairs, alterations, etc., during the year 1867 was upwards of $60,000. Both steam and water power (Mad river) are used, and combined they amount to about 300 horse power.

All descriptions of manufactures are sent from the factory by railroad and steamboat, to the warehouse in New York, whence they are sent throughout the American continent, to Europe (chiefly England,) and other foreign parts. The company has a resident Agent in Liverpool, Mr. Israel Holmes, a native of Waterbury, through whom they continually receive such French, German and English goods as are required in their manufactures, and in connection with their other business in New York. Besides the above factories, the Scovill Manufacturing Company have one at New Haven, for the production of every description of photographic cases, frames, cameras and apparatuses, and another in New York City.

The warehouse in New York, which is 160x60 feet, comprises three floors, and fronts on Park Row, Beekman and Nassau streets, and is presided over by the experienced resident Agent, Mr. Samuel Holmes, a gentleman who has been in the business from boyhood and has been continuously connected with this establishment for nearly 30 years.

The names of the founders of this establishment and their successors are honorably identified with the history of the town from its earliest days down to the present, and the distinction won for their families is worthily upheld by the multiplied works of general usefulness in which the institution is so prolific. Good works are another Jacob's ladder, on which angels are forever ascending and descending; and surely, if to direct human energy and skill to works of general human advantage, tirelessly, persistently and well, be an honor above the emptiness of praise, speaking eloquently before the throne of the great Artificer, who ceases not to hear and to reward, then the works of an establishment like this, beneficent in all its influences, have a nobler signification than mere prosperity in worldly things. They raise the humble artisan to the height of divine prospects, and his conscientious employer also to the surety of rewards more substantial than earth can bestow; they disclose the path to heaven, and say to all the guides and guards, the sons and daughters of toil, fail not, nor weary of well-doing, for continuing in such, with earnest faith, beyond the skies awaits your sure reward.

The Benedict & Burnham Manuf'g. Co., was founded by Deacon Aaron Benedict, who was born in that part of Waterbury, which is now Middlebury, August 9, 1785. At an early age he became a member of Yale College, but after eighteen months was obliged to leave on account of ill health. He returned to Waterbury in 1804, and became a partner of Joseph Burton, in mercantile business, which they carried on without much profit till 1812.

He then commenced the manufacture of bone and ivory buttons; but this business after several years trial, not proving satisfactory, he became connected in 1823, with Bennet Bronson, of Waterbury, and Nathan Smith, Wm. Bristol and David C. DeForest, of New Haven, in the gilt button business, under the partnership name of "A. Benedict." He was the general partner, and had the exclusive management of the concern. The prosperity of Waterbury, as a manufacturing town, may be said to date from the formation of this company; though the gilt button business had been established and carried on to a limited extent for many years. The capital was $6,500. Many discouragements at first embarrassed the enterprise, but perseverance finally secured success. Skilful artisans were obtained from England. It was the first aim to make a good article, and the second to obtain good prices. Buttons gilded with something better than "dandelion water," were first sent to market in the spring of 1824. Goods of the

Aaron Benedict, Pres. **Chas. Benedict, Treas.** **Chas. Dickinson, Sec'ry.**

BENEDICT & BURNHAM MANUFACTURING CO.

WATERBURY, CONN.

Rolled and Sheet Brass,

And German Silver,

Wire and Tubing, Brass and Copper Rivets and Burs; Brass and German Silver Castings, to order; Copper, Spelter,

Nickle, Ingot Metal, Jack Chain, &c.

BURNERS!

AND COAL OIL LAMP TRIMMINGS.

BUTTS AND HINGES.

DEPOTS—68 Federal Street, Boston, and Corner of Fifth and Commerce Streets, Philadelphia.

value of about $5,000 were made during this year. Soon after the formation of the company, Benjamin DeForest, of Watertown, and Alfred Platt, of Waterbury, became members by purchase. The partnership was renewed in 1827, and the capital increased to $13,000.

The second partnership expired Feb. 2d, 1829, when a new one was formed under the name of Benedict & Company, with a capital of $20,000. Mr. Benedict's partners were Israel Coe, Bennet Bronson, Benjamin De Forest, Alfred Platt and James Croft. In addition to their old business, they dealt in merchandise, and rolled brass for market. They had previously, as early as 1825, made brass for their own use and sold some, but this was not then considered an important branch of their business. Thenceforth it became so.

On the 10th day of Feb. 1834, the copartnership of Benedict & Co. expired, and a new one, with a capital of $40,000, was entered into, with the name of Benedict & Burnham. The partners were Aaron Benedict, Gordon W. Burnham, Bennet Bronson, Alfred Platt, Henry Bronson, Samuel S. De Forest and John De Forest. The two first were the general partners and agents of the company. Mr. Benedict continued to have charge of the business at home, which was prosecuted with great energy and success for the next three years. By his prudence and skill, the company was carried through the financial crisis of 1837, without dishonor or serious loss. The copartnership was renewed March 16, 1838, with a capital of $71,000, and again March 11, 1840, with a capital of $100,000. Previous to this last date, or in 1839, the second financial crisis came on, which was followed by a prolonged depression in business. The company made nothing for three years.

On the 14th of January, 1843, the company of Benedict & Burnham gave place to the "Benedict & Burnham Manufacturing Company," a joint stock corporation, the first formed in the town, under which name the business is still carried on. The capital was $100,000. Mr. Benedict was chosen President, which office he has held ever since. In 1848 the capital was augmented to $200,000, and in 1856 to $400,000. The business has been regularly and constantly increasing from 1824 to the present time. The making of German silver became an important branch of it at an early period; so did the drawing of brass and copper wire. The company now manufacture almost exclusively, sheet brass, German silver, brass and copper wire and brass and copper tubing. A business which was started years ago on a most diminutive scale, has now become one of the most important in the United States, with an invested capital of $1,000,000.

Their buildings are a brass casting shop 60x90 feet, which they claim to be the largest and finest in the world, the floor being of stone and the roof of iron, with every facility for immense castings in that line and a model for other manufacturers through the country, who have made a trip to this city to see it. The rolling mill is a large 1 story building 175x100 feet, where are rolled into sheets the metal which is carried from this department to others to be manipulated and formed into the many useful household goods which this company manufacture. The rolling mill has 2 ells, 1, 70x130 feet, which was built in 1860, and the other 110x60 ft., 2 stories, used as a wire mill, with additions, used for soldering, and for the wire and tube mills 50x50 feet. The lamp shop is 30x100 feet, 3 stories and attic, and the "clock shop," in which is the rivet, butt, hinge and machine shops, is 160x30 feet, 3 stories and attic; part of the building being occupied by the Waterbury Clock Company, who are connected with this company. The manufactory is located at the junction of the Naugatuck and Mad rivers, the water

AMERICAN PRINTING COMPANY,

PUBLISHERS OF THE

Daily and Weekly American,

—AND—

STEAM JOB PRINTERS,

WATERBURY, - - - - - - - - ***Connecticut.***

from Mad river furnishing the power for the rolling mills, through the medium of an undershot wheel, which is 28 feet in diameter and about 250 horse power capacity the fall being 30 feet. A 70 horse power Woodruff & Beach engine with two 50 horse power tubular boilers in connection with a 55 horse power turbine water wheel furnish the power for the remainder of the works, the water for the turbine water wheel coming from the Naugatuck. The public can readily observe by the dimensions of these works, covering nearly 4 acres, that it is one of the leading manufacturing establishments in the world, the capacity of the works in machinery and tools, added to the long experience of the proprietors as well as the employees, make this concern as perfect in every part as money and time can make it.

In July, 1868, this company bought the City Manufacturing Company, which is located within their enclosure, and is probably the oldest manufactory of kerosene lamps, tops and burners in the country. To furnish the metal and run this establishment requires a man of much financial ability, and to give an idea of what is consumed in this establishment a few items would not be out of place. From January 1, to July 1, 1868, they used 500,000 lbs. of copper and 400,000 lbs. of spelter, nickel and scrap, turning out about 900,000 lbs. of German silver; consuming 2,000 cords of wood, 15,000 bushels of charcoal and 1,500 tons of hard-coal per year, and employing 250 skilful assistants. The officers of the company are Aaron Benedict, President; Chas. Benedict, Treasurer; Chas. Dickinson, Secretary. The old gentleman is now 84 years of age, and in Sept. 18, 1868, celebrated the golden wedding of himself and wife, who is still living though somewhat infirm. We quote from the Waterbury *American* of Sept. 19, 1868, feeling it our privilege to perpetuate the name and memory of so practical and beneficent a man as Deacon Aaron Benedict:

"The residence of Deacon Aaron Benedict last evening, presented a scene of unusual interest. The occasion that called it forth, was the sixtieth anniversary of the wedding day of the worthy and honored couple who have for so many years happily trod the checkered pathway of life together, and who have, perhaps, enjoyed as many of the comforts and blessings of life as usually fall to the lot of mortals, while they have not been unmindful of the claims of others on their sympathies and generosities.

Mr. Benedict was married in 1808, and is now, according to the record in the history of Waterbury, 83 years old. Though struggling hard during the early years of his manhood, fortune has for many years smiled upon his pathway, and while he has builded up himself and family, public interests and private benefactions have not been neglected. The lady whom he had led to the altar sixty years ago, though somewhat infirm, still possesses much of the vivacity of earlier years, and enjoys the hearty good will of a large circle of friends. The gathering last evening, therefore, was one of peculiar interest, not only to their family and immediate friends, but to a large circle beyond. Nearly two hundred invitations were given out embracing old and young, and over one hundred were present, one of whom, Mrs. Anson Sperry, widow of the late Captain Sperry, was present at the wedding of Mr. and Mrs. Benedict, sixty years ago. Several others present were quite advanced in years. A considerable number who were invited were too feeble and infirm to go out, and sent regrets. Among these were Mr. and Mrs. Harry Merriman, who have also been married sixty years.

At the close of the reception, the following poem was read by the Rev. Mr. Anderson:

TO MR. AND MRS. AARON BENEDICT, ON THE SIXTIETH ANNIVERSARY OF THEIR MARRIAGE, SEPT., 1868.

We meet to-night, with hearts elate,
Your home bright welcome shedding
Beyond the open outer gate,
To celebrate your wedding.

Sixty full years have slipped away
Since that far-off September;
We therefore find the marriage-day
Not easy to remember.

Whether the morning sun rose clear,
And gave you summer weather,
Or all the rains of all the year
Came down, that day, together;

Whether the hearts that beat with yours
Felt just a touch of sadness,
Or hope, which shines while it allures,
Shed all around you gladness;

Whether the crops were safely in,
The larders packed with plenty,
And all men gay, when sweet Eighteen
Said "Yes," to Three-and-twenty;

We cannot tell: 'tis given to you—
Chief actors in the drama—
You only, gazing back, to view
The distant panorama.

You see to-night the ancient house,
And street and road and meadows;
Old friends who heard your plighted vows
Rise from the land of shadows;

They fill once more the lighted room,
They crowd upon your fancy,
Forth summoned from the deepening gloom,
By memory's necromancy.

What wonder if, with scenes so bright,
The past, your hearts beguiling,
Should steal them from the friends, to-night,
Who bless you with their smiling!

Yet, all who truly love the past
Should love no less the present:
What years are grander than these last!
What olden days more pleasant?

And you, who count your threescore years
Of mutual love and duty,
Will scarce commemorate with *tears*
Their vanished light and beauty.

For here those filial voices sound
Which leave no sorrow after,
And sad remembrances are drowned
In waves of youthful laughter.

Here, children's children, pressing nigh,
Rejoice to stand beside you,—
In whose true hearts, while years go by,
New honors still abide you.

Here, too—the moisture on her brow
Of Jordan's sacred water,
And consecrate by parents' vow—
You bless a grandchild's daughter.

And while the little one receives
That name in honor spoken,
You see the cord affection weaves
Stretch down the years unbroken.

From others whom you love as well,
No smile to-night is beaming:
In that far Country where they dwell
You see them in your dreaming.

And other two you miss, with all
Their strong words of affection;
But these are safe; not one shall fall
From love's supreme protection.

No room for sadness, then, amid
To-night's unchecked caressings!
Let life's obtrusive grief by hid
Behind the light of blessings.

And let us, while we scan the years—
Each checkered scene reviewing—
Learn what results a good man rears,
His steadfast work persuing.

Often above men's crumbling bones—
While eyes of love are weeping—
We pile the monumental stones,
To mark where friends are sleeping.

Sometimes, in busy streets we see
A like sepulchral token—
Gigantic piles of masonry,
The tomb of fortunes broken;

Grand projects, dead beyond recall,
Great hopes once fondly cherished,—
And silent shop or empty hall
To tell us where they perished.

But you, good sir, with look benign,
May point to that old building,
Devoid of ornamental line
Or trace of gaudy gilding,

Which, standing yet, but not alone,
Throbs with responsive shiver
To clash of wheels and furnace-moan,
Between it and the river.

'Tis yours, amidst the massive walls,
Which echo now so loudly,
Thinking of him who built St. Paul's,
To write your record proudly.

To say, with that success content,
Wherewith the years have crowned you,
If ye would see my monument,
'Tis here, 'tis all around you.

Let then, the circle open wide,
Which keeps you at its centre;
And, old friends pressing to your side,
Let new friends also enter.

So, with our city's gradual growth,
The number will grow greater,
Who in their hearts shall hold you both,
With earlier love or later.

Joining your honored names with those
Who struck the path when you did,
'To you,' we'll say 'our city owes
What cannot be computed.

Move on, then, blest of many tongues,
Close to the pearly portals!
You soon will hear the angel songs,
Soon walk with glad immortals.

And while you stay, reminding us
Of old years fading slowly,
We'll praise the pattern woven thus—
So simple, truthful, holy.

We bless you for those good old ways
You will not quite relinquish,—
Ay, for the ancient horse-and-chaise
No changes can extinguish.

Jog on, good friends, with steady gait
And well restrained emotions,—
The virtues in you duplicate,
But no new-fangled notions!

You'll find—take now whatever path—
Few dangers to beware of,—
And this for comfort, that each hath
The other to take care of!

Move on, amidst these younger friends,
To meet those gone before you;
The home in which the journey ends
Sheds now its radiance o'er you.

And when the song of vanished ones
Sounds from those mansions sweetly,
A voice through all their music runs
That wins your hearts completely.

The glory gleams through open gates—
Your welcome to their meeting;
And there a marriage supper waits,
And there our Father's greeting.

BROWN & BROTHERS, manufacturers of cold finished high brass, low brass, gilding metal, German silver and copper, in all forms of roll, sheet wire, &c., &c. The business was established in 1851. The size of buildings is as follows: The main building is 125x200 feet; there is also other large buildings, covering over 35,000 square feet floor room. They employ 250 men and produce 1,800,000 pounds of brass goods yearly.

WATERBURY CLOCK COMPANY. Warehouse, 4 Courtland street, New York; Factory, Waterbury, Conn. Charles Benedict, President; E. A. Lum, Secretary; M. Bailey, Treasurer. The origin of the business of the Waterbury Clock Company, dates back to the year 1856—a period of twelve years ago, and a surprisingly short one when we take into consideration the imposing magnitude to which the trafic of the company has grown. Previous to 1856, the proprietors of the extensive manufactory of brass, known to the world under the firm style of the Benedict & Burnham Manufacturing Company, conceived the idea of adding a clock branch to their establishment in Waterbury, to supply an additional market for the brass they have largely manufactured for years; and in pursuance of this enterprise, in 1856 they employed Mr. Chauncey Jerome and his son, (who had been associated with Phineas T. Barnum in the clock business, until through the fraudulent operations of others, he failed,) to inaugurate this new department of their business. This purpose having been accomplished, the Messrs. Jerome retired in 1857, and were succeeded in that year by Mr. E. A. Lum, the present Secretary, who has been at the head of the manufacturing department of the Waterbury Clock Company ever since. The company was duly organized under that name, on the 24th March, 1857, the stockholders of the concern then being as follows:

Aaron Benedict, G. W. Burnham, Henry Bronson, Arad W. Welton, John S. Mitchell, Charles Benedict, C. J. Carrington, D. F. Maltby, Norton J. Buel, Stephen M. Cate, Andrew Anderson, Henry Bronson, Edward Mitchell, Alonzo Grannis, B. De Forest, Jr., Israel Holmes, 2d, John C. Booth and Charles Benedict, Trustees.

The establishment now comprises four main buildings, viz.: the movement factory, dial factory, finishing factory and clock case factory. The movement factory is a brick structure, 3 stories, 150x30 feet. It is supplied with steam power by a 75 horse engine, manufactured by Woodruff & Beach, of Hartford, Conn. The finishing factory is 3 stories, 150x30 feet, (like the one above mentioned.) The first floor is occupied solely for finishing marine movements.

The dial factory is an antique but substantial structure of wood, erected in the year 1824, when Lafayette revisited this country. It is two stories high, and was formerly occupied by the Benedict & Burnham Manufacturing Company, as a button factory. It was constructed in the old-fashioned strong style, and is still in a good state of preservation.

All the four main buildings of the establishment stand at a distance from each other, thus diminishing liability to the destruction by fire. The Clock Case Factory, which is the largest of the four, is located about a quarter of a mile from the others, and was built in 1865, on the ruins of the old Cotton Gin Factory, at one time occupied by Messrs. Abbott & Wardwell as a button factory. The ground upon which it stands being about 2 acres in extent, affording ample room for the storage of lumber, coal, etc.

The case factory itself is probably the most commodious and completely equipped of all its kind in this country. It was planned by and built under the personal superintendence of of Mr. E. A. Lum, Secretary of the company, with especial regard to the peculiar requirements of the business. The architect and builder was Mr. D. H. Maloy. It is a 3 story building with basement, has the form of the letter T, with a front of 100 feet, a rear length of 150 feet, and a width of 36 feet. The building, out buildings and grounds cost the company $60,000. The machinery is driven by a steam engine of 50 horse power, having 2 tubular boilers of 60 horse power each, built by the Pacific Iron Works, of Bridgeport, Conn.

The number of operatives employed in the four factories is 125. The cost of tools and machinery was about $40,000—mostly new, and adapted to the production of the most perfect work. The annual sales of the Waterbury Clock Company reach from $300,000 to $500,000, and the value of stock usually on hand is about $300,000. The 10 hour system is observed, the wages ranging from $5 a day down to the ordinary stipend given to a boy—the average pay a day for men is about $2 50.

The Waterbury Clock Company are represented at No. 4 Courtlandt street, New York, and at No. 144 Lake street, Chicago, and keep at these agencies a full supply of their manufactures.

HOLMES, BOOTH & HAYDENS, manufacturers of sheet brass, copper, German silver and silver plated metal, kerosene burners and trimmings, silver plated ware, &c., &c. They commenced business in 1853, with a capital of $400,000, and are now doing a business of over $1,000,000 yearly. They occupy a two story brick building, 600 feet front and 50 feet deep, and employ 500 hands. A. S. Chase, President; H. H. Hayden, Vice President; James M. Abbott, Secretary.

WATERBURY BRICK CO. was incorporated in 1865, capital $10,000, C. C. Post, President, R. B. Wheaton, Secretary and Treasurer. They employ 40 persons; the yard and shed occupy about 1½ acres, the latter 270 feet long; facilities for making 4,000,000 bricks per year.

HOLMES, GRIGGS & SMITH, commenced business in 1865. They occupy a main building 60x30 feet, with an ell 25x70 feet, besides several other buildings, which are not connected with the main one. They manufacture every style of buckle and clasps, and many other small articles from brass, iron, tin, &c. Employ about 50 hands. They also own, and run in connection with this factory, a brass rolling mill, located in New York City, on the corner of 2d avenue and 22d st., where they manufacture rolled brass and German silver, brass, copper and German silver wire and tubing.

JOHN F. BRONSON commenced here, in 1864, the manufacture of lava and metal buttons and trimmings; employing 12 persons; occupies 3 floors, 25x70 feet. The power is furnished by 15 horse Wright's little giant. Mr. B. formerly carried on the carriage trimming business, near the depot.

THE WATERBURY BUCKLE CO. was incorporated in 1852 with a capital of $30,000; George R. Kelsey, President, P. Brett, Secretary and Treasurer. Their building is 25x150 feet, 2 stories, built of wood. The power is furnished by a 25 horse steam engine, made by the Mattewan Machine Co. This company employ 75 persons, and do a business of $100,000 annually.

BLAKE & JOHNSON commenced the manufacture of machinery, pins, rivets and hardened cast-steel rolls in 1852. They now occupy a main building 160x30 feet, 2½ stories, built of wood, with office adjoining. They also have a hardening and blacksmith's shop and warehouse 60x30. This company employ 30 persons and use about $50,000 worth of iron, steel and brass per year.

THE HOOK AND EYE MANUFACTURING CO. was incorporated Sept., 1867, with a working capital of $30,000, O. Hayward, President; Willis Johnson, Secretary and Treasurer. They occupy a 4 story stone mill, 84x60 feet, located about 2 miles from the Post Office, on the Cheshire turnpike.

The motive power is furnished by a breast wheel, with a 28 feet fall, on Mad River, with a capacity of 100 horse power, employ about 50 persons, making upholstery hardware and general brass goods. Salesroom 33 Reade street, New York.

Wm. Davis, Jr., commenced the tanning business as successor to the Waterbury Leather Manufacturing Company, in 1855, in a building located on Mad River, 30x100, with wing 30x40 feet, 3 stories, with basement, employs 15 persons and does a business of about $30,000 per year. His specialty is tanniug leather for suspender manufacturers; manufactory located about 1 mile from the Post Office on the Cheshire turnpike.

The American Suspender Company was incorporated in 1857, with a capital of $300,000, being a consolidation of Hotchkiss & Merriman and Warren & Newton. The main manufactory and office is located on Mill street, in the southeast part of the city, on Mad river, a branch of the Naugatuck. The main building is 260x48, averaging 5 stories, with two wings 60x30 each, 2 stories, built for the most part of brick. The motive power for this mill is furnished by a 200 horse power engine with 3 flue boilers, made at Wilmington, Del.; also, two water wheels, one turbine and the other a breast wheel; the fall here is 15½ feet, furnishing immense water power for propelling the machinery. Besides other machinery there are run 175 looms for the manufacture of India rubber suspenders, elastic, cotton yarn and cotton and rubber thread. This company also run a mill at Oakville, 3 miles from the city, in connection with the one here. It is 34x100 feet. 3 stories, and driven by a 25 horse power engine, and 2 breast wheels. These mills are capable of turning out $1,000,000 worth of goods per annum, their production of suspenders alone in one day being 500 dozen, besides other goods too numerous to mention. This company employ in both mills and others at their homes in the surrounding country, about 500 persons.

The Waterbury Button Co. was incorporated in 1849, with a capital of $100,000. H. H. Hayden, President; E. P. Bronson, Secretary; J. C. Booth, Treasurer. They employ 75 persons, manufacturing buttons and brass goods. The business was established by Benedict & Burnham, the present company being successors to them. The power is furnished by a 16 horse power engine built by W. Adams & Co., of Boston, with one tubular boiler. This company, since the war have turned their attention to the manufacture of fancy and dress buttons. Salesroom in New York, 49 Chambers street, and in Boston, Mass., 17 Federal street,

The American Ring Co. was incorporated in 1852 with a capital of $50,000, L. J. Atwood, President, Edward J. Rice, Secretary. They now occupy two 2 story buildings, 30x40 and 20x30 feet respectively with L 20x40 feet. They employ 40 persons, manufacturing curtain, screw and suspender rings and eyelets. The motive power is furnished by a Bodine turbine water wheel and a 15 horse power engine. This company do a business of about $70,000 per year.

The Steele & Johnson Button Co. was incorporated in 1857, with a capital of $30,000. C. M. Mitchell, President; Frank Washburne, Secretary and Treasurer. The works are located on Jewelry street, occupy a two story wooden building 130x35, with two ells 40x30 each, manufacturing iron, brass and plated jack chains, saw screws, metal goods and buttons. Employ 90 persons. The engine that drives the works was made by the Pacific Iron Works, 15 horse power, with one upright tubular boiler. Their salesroom is 62 Reade street, New York.

Asa F. Rogers commenced experimenting in electroplating at Terriffville, Conn., a small village in the town of Simsbury, a few miles from Hartford, about the year 1842, or simultaneously with the first experiments in England. For the first few years the business was limited to the plating of articles such as spoons and forks, imported from England. In 1847 Asa associated with him his eldest brother William, and youngest brother Simeon, who commenced manufacturing the raw metal then known as German silver, and named by them German alabata, on account of its whiteness and superior quality, and to distinguish it from the more common qualities of metal the same article is called by many Nickel Silver. Waterbury being the great centre for the manufacture of German or nickel silver metal, was selected by this firm in 1858, as the most desirable locality in which to manufacture economically, spoons and forks on a larger scale than had heretofore been attempted. The business increased so fast that a larger amount of capital was demanded, and in 1859 the present company — Rogers & Bros. was incorporated, continuing the original firm name. The business has steadily increased until from a business of less than $50,000 in 1858–9, their sales of spoons and forks alone amount to about $500,000 per annum.

The manufactory is located on Mad river, a branch of the Naugatuck, and in the identical buildings where Brown & Elton commenced the manufacture of brass years ago, and from which place sprung many of the large manufacturing concerns of Waterbury. The buildings are 300 feet in length, varying from 30 to 75 in width, with L 40x25 feet. The original building is of stone, 1 story, to which has been added, from time to time, wooden buildings, 2 stories, built of wood. The metal is obtained from the manufacturers near by, and after the spoon or fork is cut out in the rough, the scraps being about two-thirds of the original amount, is returned to the manufactories there to be worked over and returned to this concern to be again served the same process. The other one-third is then rolled out by ponderous rollers, and the most minute details of shaping attended to, from thence it goes to the plating room and the burnishing room, in which we find the burnishing done by machines invented by Mr. L. S. White, who is one of the company and Superintendent of the manufactory, from the first.

Mr. White is also the inventor of other valuable improvements in machinery and tools owned and used by this company exclusively. The burnishing machines do the work much quicker than it can be done by hand, and as well. The many labor saving machines owned and used by this company, reduces their expenses as regards economy in labor and consequently reduces the price of their goods. From the burnishing and polishing room, they go to the packing room, and thence by an ingenious railway, communication to the shipping room and office, where they are shipped to all parts of the country. The motive power of these works is furnished by 3 Tyler turbine water wheels and a Woodruff & Beach 60 horse power engine, with 2 tubular boilers, 40 horse power each, from which the steam is obtained to heat the rooms as well as to run the engine. This company consume 50,000 ounces of silver and 300,000 pounds of albata or nickel silver annually, manufacturing 14,000 gro. annually, being larger than any concern in the world in the production of forks and spoons. This firm is the oldest, and for several years the only one of the name in existence, they do not enter into any combinations, but continue to make the very best quality of goods in their line, believing they can successfully challenge competition. Salesroom in New York, 203 Broadway.

The American Flask and Cap Co. was incorporated in 1857, with a capital of $125,000; the officers are A. I. Upson, President and Treasurer; S. B. Terry, Jr., Secretary. Their works are situated near the rail road, the main building being 45x200, three stories, built of stone, with wing 40

ROGERS & BROTHER,

WATERBURY, CONN.,

—Manufacturers and Platers of—

Spoons, Forks, Butter Knives,

METAL HANDLE, TEA, DESSERT & TABLE KNIVES,

(Plated Steel Blades.)

Ladies', Pie, Cake, Fish, Ice Cream and Crumb Knives, Cake Cutters, &c., &c.,

Made of the best refined Nickel Silver, or genuine Albata Metal.

WEIGHT OF PLATE WARRANTED.

x120, one story; also, a wooden building, 40x100, two stories, for the manufacture of paper boxes, and 14 other buildings, used for castings, store house, office, charging rooms, packing rooms, &c. This company are successors to the American Powder Flask Co. who were established in West Meriden some 12 years ago. The works employ about 200 persons, the daily production being 2,500,000 caps. These works were driven during the war, employing at that time 250 men. The power is furnished by 2 breast wheels, 24 feet in diameter, the fall here being 19 feet. The water is brought through a canal from the Naugatuck, about 1½ miles, to the mill.

The Farrell Foundry and Machine Co. commenced their business in 1849, with a capital of $90,000. Franklin Farrell, General Agent; Walter Fitch, Secretary and Treasurer; E. C. Lewis, Agent, at Waterbury. Their main building is 100x32 feet, used as a machine shop, 3 stories, built of brick; foundry 50x50, with wing 40x38; pattern shops, 30x60, fire-proof, 2 stories, both built of brick; blacksmith's shop, 40x25 feet, with wing 20x25 feet. A new building was built in the fall of 1868, 3 stories, 34x74, used for millwright and machine business. They employ 60 persons and turn out about 5,000 lbs. of castings per day beside machinery for iron, brass, rubber and copper mills and presses of every description. The motive power is furnished by a 25 horse power engine made by Woodruff & Beach, with 1 flue boiler. The works are situated opposite the depot and were built in 1851. The main works are situated at Ansonia, Conn., for which place see account.

A. S. Upson & Co. commenced the manufacture of buttons about 1862. They occupy a building 60x22 feet. The power is furnished by an overshot wheel, the fall being 8 feet, located on Great Brook in the centre of the city.

The Waterbury Brass Co. was incorporated in 1845 with a capital of $400,000, C. H. Carter, President, J. S. Elton, Treasurer and E. D. Steele, Secretary. Their main building is 175x125 feet, with wing 40x100. They also have a mill 100x102 feet, 2 miles from the Post Office, on the Cheshire turn pike. The manufacture of sheet brass, German silver, brass and copper wire, brass kettles, rivets, &c. Employ 100 persons; turn out 100,000 pounds of brass per month. Both mills are furnished with water power, one having a breast wheel 24 feet in diameter, the fall being 19 feet. The water is brought from the Naugatuck by a trench. The mill in the country has a wheel 34 feet in diameter, the fall being 32 feet. New York office, 52 Beekman street.

Great Brook Mills were incorporated in 1866 for the manufacture of woolen goods, such as cloakings, chinchillas, meltons, fancy cassimeres, &c. This company are successors to Whittal, LeFevre & Co. Their main building is 175 x45, 5 stories, with buildings used as an office, dye house, &c., attached. This company employ 150 persons, and use 12 sets of machinery, 3,300 spindles and 50 looms. The motive power is furnished by a 140 horse power engine made by Woodruff & Beach, Hartford, with 2 flue boilers; another engine, used for heating and dying, 30 horse power. This company use 2,000 lbs. of American wool per day, turning out 800 to 1,200 yards per day, according to the kinds of goods manufactured. The manufactory has a Jonval turbine water wheel of 30 horse power, the fall here being 55 feet. The works are lighted by gas machines under Hetzel's patent.

The United States Button Co. was incorporated April, 1865, with a capital of $100,000, for the manufacture of covered gilt, glass and navy buttons, R. E. Hitchcock, President, G. S. Parsons, Secretary. They occupy a 3 story buildings 30x80 feet, built of wood, another 30x100 feet, 3 stories, built of brick; employ seventy-five persons, and has a productive capacity of 250 gross per day. These works were formerly conducted by Hitchcock & Castle, the present company succeeding them. The works are run by a breast wheel 40 feet in diameter with 40 feet fall. This concern is the highest in Waterbury being located near the summit of the ridge of hills that surround the place, and commanding a fine view of the Naugatuck valley and the city and surroundings.

Hayden & Griggs commenced the manufacture of lamp burners, lamp and lantern trimmings, in Aug., 1868. They occupy a building on Elm street, 30x60, 2 stories, built of wood, employing 50 persons; Root's trunk engine, 20 horse power.

Wright & Dayton commenced the manufacture of cotton batting in July, 1868, the only business of the kind in the city. The building is 75x20, 2 stories, employing 5 persons, turning out 400 pounds per day. G. W. Wright, A. S. Dayton.

A. Platt & Sons commenced the manufacture of buttons in 1844, the business being established by the father in 1838. They now occupy a new brick building, built in the fall of 1868, 25x70 feet, 2 stories. They also run a mill on the Naugatuck, called Platt's Mills, about 3 miles from the Post Office of this place, 28x80, power furnished by an overshot and Tyler turbine wheels, with a fall of 18 feet. This company employ about 60 persons, turning out 1,200 gross per day of buttons. Their agents are Porter Bros., 50 Warren street, New York.

The American Pin Co. was incorporated in 1846, with a capital of $50,000, which has since been increased to $150,000. T. I. Driggs, Secretary and Treasurer. The

buildings are situated in the centre of the city, on the principal street. The main building is 100x30, 4 stories, built of brick, with buildings for packing, &c. This company use 400,000 lbs. of iron and brass annually for the manufacture of pins, the capacity of the mill being 2,000 packs or 6,800,000 pins per day; employ 90 persons, using an 80 horse Wright's patent engine and 3 flue boilers. This company manufacture in connection about 3,000 great gross of hooks and eyes per month, using in their manufacture 50,000 lbs. of metal per annum.

LANE, TUCKER & BEARDSLEY MANUFACTURNIG CO. commenced the manufacture of buttons of all descriptions, about 20 years ago. They occupy a building 75x25, three stories; the power is furnished by an overshot wheel, 34 feet in diameter. Employ 60 persons. The fall here is 22½ feet. S. B. Lane, Agent.

KIRK & WELTON commenced the manufacture of machinery, as successors to Thomas Kirk, in August, 1868. They occupy a room 50x30 feet; employ 6 persons, use 2 planers, 2 lathes, 1 milling machine, 1 gear cutter, and 1 upright drill.

MERRITT NICHOLS commenced the iron and brass foundry business in 1852; formerly carried on at Hopeville, 2 miles from the city. He now occupies a three story building 25x50, with wing 25x50, one story, turning out about half ton daily. Employs 8 persons,

AT WOODBURY, a few miles from Waterbury, is DANIEL CURTIS & SONS. Business established in 1836. They occupy a main building 112x36 with wing 40x36 feet, besides other out-buildings, wool house, &c. They manufacture fine black doe-skins; consume 100,000 pounds fine fleece wool, and produce yearly about 90,000 yards. A Cushman 42 inch water wheel, 52 horse power, with 14 feet head and fall of water, is used to run their machinery.

JOSEPH T. CAPWELL established business some twenty-five years ago, for the manufacture of shot belts, and shot pouches. He occupies two 3 story buildings 20x30 and 25 x40 feet respectively. He employs 6 men upon brass work, and 6 girls are constantly engaged in stitching pouches. His business done amounts to about $25,000 per annum. The power to run the machinery is supplied by overshot water wheels, under 10 feet fall.

WATERFORD, 46¼ miles from New Haven, 3¾ from New London, 126 from New York and 106 from Boston; a country station in a town by the same name, on the Shore Line Railroad. This town was taken from New London in 1801. There is a harbor here for small vessels.

WATERVILLE, 2½ miles from Waterbury and 30½ from Hartford, on the Providence, Hartford and Fishkill Railroad. Population about 400.

SPRAGUE, BOYDEN & WELTON, manufacturers of pocket cutlery, commenced business in 1865; occupy a 2 story building 50x30, employ 25 hands and turn out about 100 dozen per week. Use a 20 horse power breast wheel.

WATERVILLE KNITTING CO. manufacture gents' merino shirts and drawers; commenced business April, 1868; 3 set; building 40x70, 2 stories. Consume about 1,500 lbs. cotton and wool, and turn out about 75 dozen per week. Machinery driven by a 30 horse power, overshot wheel. J. Crampton, Superintendent.

BARNARD, SON & CO., manufacturers of shears of all kinds, lamp trimmers and button-hole cutters, commenced business in 1866; employ 20 hands and turn out about 30 dozen per week. Rent building with power of Sprague, Boyden & Welton.

WAUREGAN, 39¼ miles from Worcester, and 20½ from Norwich, on the Norwich and Worcester Railroad. A flag station. The village is one mile west of the depot, containing about 2,000 inhabitants and 1 church. The village is owned by the Wauregan Mills, an incorporated company. Truman Beckwith, President; Orray Taft & Co., Treasurers.

They occupy two mills, 500x50 each; the front mill is 3 stories and basement, and back mill 4 stories, with a connection between 157 feet in length. Both mills have 47,240 spindles, 1104 looms. Consume 80 bales of cotton per week, and produce 746,666 yards of print cloths per month, averaging 7 yards per pound. Two kinds are made here, 23x36 inch, 64 and 98 square. The company own 80 houses laid out in streets, and painted white—a pleasing contrast between the stone mills, which are situated directly in front of them, and on the Quinebaug river. The power is supplied by 3 Jonval 8 feet turbine wheels, the fall being 16 feet. Employ 800 persons. James S. Atwood, Agent; Caleb P. Wilson, Superintendent.

WEATOGUE, a country station, 36½ miles from Northampton and 39½ from New Haven, on the Canal Railroad, comprising about 17 houses.

WESTBROOK, 27¾ miles from New Haven, 22½ from New London, 104 from New York, and 128 from Boston, on the Shore Line. Most of the inhabitants are engaged in farming, at the same are mariners engaged in coasting.

SMITH & KIMBERLY manufacturers of single twist solid spur auger bits at Essex, 6 miles from this depot, located on the Connecticut river. This business was commenced in 1867, the concern being established in 1866. The main building is 40x60, 2½ stories, with 2 other buildings 30x40 2 stories, and 35x25 respectively. The motive power is furnished by a turbine wheel with 30 horse power, the fall here being 12 feet, the diameter of the wheel 42 inches. They consume 20 tons of Jersey steel per year, the daily production being 25 dozen. The annual production $40,000. The office of the company is located at their hardware store, 276 Chapel street, New Haven.

WEST CORNWALL, 61 miles from Bridgeport and 49 from Pittsfield, a village of about 400 inhabitants and 2 churches, situated in the town of Cornwall, on the Housatonic Railroad, a mountainous township on the east side of the Housatonic River.

WESTFIELD, 2½ miles from Middletown, on the Middletown branch.

WEST HAVEN, 2½ miles from New Haven, 73½ from New York. A village on the New York & New Haven Railroad, in the town

of Orange on the suburbs of New Haven, with which it is connected by horse railroad. The residents of New Haven frequent this village during the summer months, as it contains an attractive hotel in close proximity to good fishing and sea bathing.

WEST MYSTIC, 133 miles from New York and 99 from Boston, on the New London, Stonington & Providence Railroad, is situated 2 miles above the mouth of Mystic River, contains 2 churches and is adjacent to and really a part of the village of Mystic.

WESTPORT, 27½ miles from New Haven, and 48½ from New York. A village about 2½ miles from the depot, by the same name, on the New York and New Haven Railroad.

THE SAUGATUCK MANUFACTURING Co. is reached from this station. The company was incorporated in 1864. They manufacture ladies' covered buttons as a specialty, and buttons of all kinds. They employ 100 hands. The main building is 100x50; foundry 100x33, two stories; packing house 50x25, one story. A 20 horse power engine supplies the power. A storage shop is 30x40, one story. E. S. Wheeler, & Co., Selling Agents.

WILLIMANTIC, 58½ miles from Providence, 31½ from Hartford, 30 from New London, 35 from Palmer, on the Providence, Hartford & Fishkill and New London & Northern Railroads; 4 churches, a newspaper, &c.

This village is one of the most beautiful of New England, and a remarkable instance of the growth of a place from its inherent energies. Situated on the banks of a fine river, of the name from which that of the village is taken, its busy principal street, its school houses and numerous churches, at once give the visitor an idea of the thrift and intelligence of its inhabitants. It has several large cotton and other manufacturing establishments, whose business is continually increasing with commensurate profits. There have been great public and private improvements made within the last few years—new streets laid out and graded, hundreds of new buildings erected, in style from the tasteful cottage to the magnificent residence of the wealthy. A number of large and handsome stores, mainly of brick and stone, have recently been added to the facilities for general business, which were necessary to the growing trade of the place. The village is now the centre of two important railroads, to which will soon be added a third, now in process of construction. Still another railroad has broken ground at New Haven for a road through Middletown, with its eastern terminus here. The business facilities thus afforded will, ere long, enable the village to take its place among the first of New England towns, and, perhaps at no distant day, to become a large and populous city. Population 4,000.

THE WILLIMANTIC LINEN Co. In February, 1854, the above company, as a joint stock concern, was organized, consisting of the following gentlemen: Austin Dunham, L. C. Ives, Elisha Johnson, Lucius Barbour. Starting February 18, 1854, with a capital of $75,000, the company soon increased it to $125,000, at which figures it was kept until 1856, when a further increase was made to $225,000. In 1857 the business of the concern had so increased that it became necessary to commence the erection of a new factory, which was completed and ready for operation in July, 1858. In 1863 the company bought of Mr. John Campbell, of New York, the old "Paper Mill" property, at the eastern end of the village, and began the erection of still another mill, for the manufacture of six cord thread.

Of the factories of this company, with their business capacities, the following description will enable the reader to form an idea of the magnitude of the enterprise in which the corporators are engaged.

For three cord thread. First—A noble building, of four stories in height, two hundred feet long by sixty-eight in width, built of grey stone, quarried from the vast ledges of the same, belonging to the company, near the spot where the building stands. This mill runs ten thousand spindles, and turns out each week twenty-four thousand dozens of three cord thread.

For six cord thread. Second—On the site of the old paper mill, purchased by the company of Mr. John Campbell, of New York, in 1863, was erected an edifice for the manufacture of an article of thread which was thought to be indispensable to the successful operation of the various sewing machines then fast coming into almost universal use. This building was commenced in the year above named, and pushed to a rapid completion. It is a model establishment, both in sightliness of exterior and adaptedness to the purpose for which it was built. Five stories in height, four hundred feet long by seventy feet in width, furnished with all the varied and beautiful machinery necessary for the manufacture of the famous six cord thread, it stands a monument of architectural beauty, its appearance giving, even to the casual passer by, an idea of the importance of the business it is designed to perfect in its various departments.

The capacity of this mill, when in full operation, will be 40,000 spindles; and the immense amount of thread which it will be capable of turning out, will be a matter of simple astonishment to the uninitiated. The sea island cotton of the finest quality, and longest staple is the only article of cotton in use at this mill. The machinery of this establishment has been mainly constructed in the machine shops of the company, and is the most perfect of its kind ever built.

The cotton passes through 28 different processes before it becomes thread, and is then sent to the bleachery and dye house, to be subjected to the operations of these departments.

One of these machines, through which the cotton passes before the spinning, is called the "Comber," (invented and patented by an eminent machine builder in France.) Quite a number of these indispensable adjuncts in the manufacture of six cord thread, have been purchased at a large expense and imported by the company, and are now in use at their factory.

The operation performed by these machines is to comb out and straighten the fibres of the cotton, separating the short fibres from the long, throwing aside the short, and retaining the long, for only the longest and finest of the cotton is used in the thread of which mention is here made.

Among other almost miracles of machinery, is one for winding and ticketing or labelling the thread. This machine seems possessed of almost human intelligence. It is the invention of the artists and machinists of the company, built at their machine shop, and is the only one in the country.

At the dye house and bleachery these operations are carried on under the superintendence of Mr. J. M. Reid. This building is 120 feet in length by 70 feet wide, with drying rooms of about the same capacity. This department is very complete in its arrangements. The mode of ventilation in the lower rooms, where immense quantities of steam are generated, is new, unique and very efficient, and the labor-saving appliances and general fitting up of the department are such as to greatly reduce the amount of manual labor usually needed in such operations, and also to promote the comfort of the workmen. Four thousand lbs. of thread a day can be turned out when the place is run to its full capacity. Attached to the main building is the boiler house,

which contains 8 steam boilers in which steam is generated for use in the dye house and the mill generally. In the upper story and attic of the main building are the storerooms for receiving and storing the products of the several mills, and from these storerooms are drawn the required numbers and quantities to fill immediate orders. All colors, and every imaginable shade of color can be produced here.

A turning shop 3 stories high is used for the manufacture of spools, consuming 25 cords of birch wood weekly. A machine shop, carpenter shop and a paper box manufactory are connected with and form a part of this establishment.

The dams in the river, used for holding back a supply of water, are immense structures of masonry, built on scientific principles, and calculated to stand the wear and tear of ages. The whole of the power for driving the machinery of these establishments is derived from the water of the Willimantic river, which has a fall of more than 100 feet in a mile, affording sufficient power, not only for the mills herein mentioned, but for many other mills and manufacturing establishments which line its banks, as it traverses the beautiful valley through which its course to the sea lies.

There are two immense reservoirs for furnishing the needed supply of water in the dry season, which sometimes occurs during the summer months, when the natural flow of the river is low. One of these is in the town of Bolton, and the other in Columbia, some miles distant from Willimantic. The real estate of the company comprises about 250 acres of valuable land, lying along the banks of the river, and a considerable tract in Columbia, where the large reservoir is located. A. B. Burleson, Resident Agent, T. S. Winn, Superintendent, Warehouse, &c., George S. Moulton & Co., 101 Chambers street, New York.

Wm. B. Swift occupies a brick building 42x100, 3 stories, boiler house 16x20, and dye house 26x76, for the manufacture of sewing silk and machine twist. This establishment was built during the fall and winter of 1868–9. He employs 100 persons, and has a capacity of producing 350 pounds of goods per week. The motive power is supplied by a 30 horse power engine made by Woodruff & Beach.

The Smithville Manufacturing Company was incorporated in 1851. Capital $160,000. James Y. Smith, President; Charles A. Nichols, Secretary and Treas.; W. Hayden, Agent and Superintendent. The main mill is 450 x50, 3 stories, and basement built of stone in 1847. A machine shop 36x100, 3 stories. This company consumes from 20 to 25 bales of cotton per week, and produce 40,000 yards of print cloths, silesias, 64 square; they run 17,000 spindles, 400 looms, and employ 300 persons. The mill is situated about ¼ mile from the depot on Willimantic, the fall being 11½ feet, 2x7 feet, and one 5 feet Collins, and one 5 ft. Howd turbine wheel, furnish the power. A 280 horse power Corliss engine with 8 cylinder boilers supplies the power when needed; the mill is lighted with gas. Office of the company, 56 Westminster street, Providence, R. I.

G. Holland commenced the manufacture of machine twist in 1868, being successor to H. & G. Holland, who established the business in 1865; the building is 100x42, three stories, built of brick with stone basement. He employs 69 persons, and the machinery consists of 8 spoolers, 1 soft silk winder, 5 raw silk winders, 5 cleaners, 5 spinners, 2 doublers, 1 reel, 1 Holland's patent stretcher patented by the proprietor, 1 power stringer, 1 steam stretcher; the power is supplied by a 20 horse power Campbell & Whittier engine, a dye house attached, is 70x26, one story, brick; a wood house and drug room, wood, 70x26, one story. This establishment consumes about 175 pounds of stock, per month.

Dunham Manufacturing Co. was incorporated in 1858, with a capital of $120,000. Austin Dunham, President; Wm. C. Jillson, Secretary, Treasurer and Agent. This establishment is located at one of the most romantic spots in Willimantic on the Willimantic river. The building was built in 1847, and remodeled in 1867. It is built of wood 190x40, 3 stories, with French roof. Tower in the centre surmounted by a novel vane giving the name of the company in letters of gold, which shine in the sunlight and presented a very unique and tasteful appearance. The buildings are painted white an indication of the cleanliness and order to be found within. They employ 150 persons; consume 30 bales of cotton per week and produce 7000 pounds of white and colored broad and narrow cotton warps and sewing cotton. Two Fall River 68 inch wheels, furnish the power, (200 horse) the fall here being 15 feet. The machines used are as follows: Three lappers, 52 cards, 7 fly frames speeders, 4 drawing frames, 25 flyer spinning frames, 15 ring spinning frames, 4,800 spindles in all, 7 reels, 13 ring twisters, 1,360 spindles, 5 narrow and 1 broad dresser. This company own quite a tract of land in the vicinity of the establishment and between the Natchaug and Willimantic rivers. The former can be brought diagonally across, joining the latter a few rods below the mill, and supplying power for a mill twice the size of this one, the fall can be made 20 feet. The village belonging to this company comprises about 20 tenements. A new office has recently been fitted up by the Treasurer. A model of convenience and luxury, heated by steam and furnished in the most approved style, presenting quite a metropolitan appearance. A park containing several acres in front of the mill and in which the office is located is the project of Mr. Jillson, who believes in spending $1,000 in the adornment of his mill and surroundings, rather than loose it by bad debts. In this connection we would state that he sells his own goods, never trusting to agents, superintends the whole establishment, and it is to his perseverance, executive ability and business thrift that the success of this company is mainly due.

Wm. H. H. Brigham occupies a part of a building for the manufacture of paper boxes. Employs 12 persons, and produces 1,500 thread and silk boxes per day.

Windham Cotton Manufacturing Co., capital $96,000. R. W. Watson, Treasurer. The main mill, 119½x50, 3 stories, with attic and basement, built in 1829, and addition built in 1855 is 85x50, 3 stories. The old original mill was built in 1824 and is 65x45, 3 stories, to which has been added a mill 90x50, 3 stories and attic, built in 1847. This company run 12,400 spindles, 336 looms, consume 24 bales of cotton per week, and produce 56,000 yards of 28-inch print cloths, 64 square. The mill is located on Willimantic River; the fall is 11 feet; 3 Collins turbine wheels supply the power; they employ 175 persons. John Tracy, Agent; Moses Page, Superintendent.

Willsonville, 18½ miles from Worcester, and 41½ from Norwich. A flag station on the Norwich & Worcester Railroad.

S. M. Wheelock & Co., occupy a mill here for the manufacture of fancy cassimeres. Commenced here in 1867, as successors to L. M. Capron & Sons, who commenced here in 1863. The manufactory is a few rods from the depot, and is 150x30, 3 stories, and basement, built of wood with dye, wool and picker house attached. The mill contains 4 set of woolen machinery, 11 broad and 6 narrow Crompton looms. They employ 75 persons; consume 600 pounds of wool per day, and produce 10,000 yards per month. A 6 feet Tyler turbine wheel supplies the power, the fall is 15 feet being lately increased to this number.

FARIST STEEL COMPANY,

—MANUFACTURERS OF—

Cast Steel, Hammered or Rolled.

Particular attention paid to

FORGINGS FOR RAILROADS.

Plates and Points, &c., Forged to pattern.

WINDSOR LOCKS, CONN.

JOEL FARIST, Pres. JOHN B. WINDSOR, Treas. C. C. EVANS, Sec.

WILTON, a station and town in the county of Fairfield, on the Danbury & Norwalk Railroad, about 7 miles from Norwalk. This town was taken from Norwalk in 1802; the surface is hilly, the soil is a gravelly loam and productive of grain and fruit; the town is watered by the Norwalk river.

WINDSOR claims to be one of the three first towns settled in Connecticut. It 1636 a colony from Dorchester, Mass., (the same society who formerly came from Dorchester, England,) bought the lands at the intersection of the Farmington and Connecticut rivers, of Sequassen, an Indian chief of the Tecumseh tribe. The town is divided into two villages, Windsor and Poquonnock, the latter village being situated about 3 miles west from Windsor, on the Farmington river. The town has a population of about 3,000. Windsor village is situated on the New Haven, Hartford and Springfield Railroad, 20 miles from Springfield, 6 miles from Hartford, and 42 miles from New Haven. There are about 800 inhabitants in this village.

Sequassen Woolen Co. Incorporated in 1855 for the manufacture of fancy cassimeres, with a capital of $100,000, W. W. Billings, President and Agent; F. Williams, Secretary. The mill is 80x44, 4 stories and attic; L 40x44 2 stories; machine shop, picker-room, &c., in a 2 story building 28x50. The dye house is in a building attached to the mill, in the rear, 30x18, 1 story. They run 5 sets woolen machinery and 32 looms, consuming 500 lbs. wool per day and making from 12,000 to 15,000 yards cloth per month. Their motive power is derived from a 45 horse power steam engine built by Woodruff & Beach, with a flue boiler made by the same company.

Poquonnock, a small village, situated in the town of Windsor, 3 miles west from the depot, on the Farmington river, has a population of about 700 and 2 churches.

Tunxis Company. This company was incorporated in 1848, with a capital of $40,000. A. Dunham, President, L. F. Pinkham, Agent. Manufacturers of print cloths. The mill is 40x80, 4 stories; picker house and stock house 24x30, 1 story, running 3000 spindles, 75 looms, employing 60 hands. This company consumes 2500 pounds cotton per week, and produce about 16,000 yards. The motive power for this mill is furnished by a 50 horse power turbine wheel.

Poquonnock Mills, incorporated in 1867, is also located here. The office of the Treasurer, N. Laprise, is at 215 State street, Hartford. The mill is 3 stories, with ell 2 stories high. This company manufacture fancy cassimeres, employing 100 persons; running 4 set of machinery, turning out 1700 yards per week. The power is furnished by a turbine water wheel.

WINDSOR LOCKS, situated on the right bank of the Connecticut River, 12 miles from Hartford, 48 miles from New Haven, 124 miles from New York and 14 miles from Springfield, on the New Haven, Hartford & Springfield Railroad; has a population of about 2,200 and 3 churches. Between the river and the railroad runs the canal which furnishes water for 3 paper mills and 7 other manufactories, among which are cotton and woolen manufactories, iron works, &c.

E. Horton & Son, manufacturers of "Horton's Pateut Geared Screw Chucks." They commenced business in 1856. Their buildings are built of brick, with granite trimmings. The main building is 55x35, 3 stories; the 2d story is filled with machinery which is run by an 18 horse power turbine wheel. The blacksmith's shop is 45x30, 1 story. Employs 12 hands and make all sizes of chucks, which are sent all over the world.

The Farist Steel Co. was incorporated in 1865, with a capital of $100,000 for the manufacture of both hammered and rolled steel. J. Farist, President; J. B. Windsor, Treasurer; C. C. Evans, Secretary. The main building is 165x70, 1 story, containing 2 trip hammers of 600 and 800 lbs., driven by 3 turbine wheels of 100 horse power. The rolling mill is 100x100, 1 story. The stands and rolls are furnished power from a 125 horse engine, made by Woodruff & Beach, with 4 flue boilers made by same firm. The office and pattern building is 25x40, 2 stories; blacksmiths' shop 20x20, 1 story. Employ 30 men and consume 500 tons iron and 400 tons blistered steel with 3,000 tons coal; producing about 700 tons steel per year.

Connecticut River Mills. This company was incorporated in 1847, with a capital of $32,000. A. Dunham Treasurer; L. F. Pinkham, Agent. Manufacturers of cotton thread. Main building 40x80, 4 stories. This company have 4,500 spindles in full running order. Picker house 36x36, 2 stories. Use about 2,500 lbs. cotton for a weekly production. Employ 50 hands. The motive power is furnished by a turbine wheel, 4 feet under a 26 feet head. This is the last wheel that runs by water from the Connecticut river going south. The company have for heating purposes a tubular boiler, made by Pitkin Bros. of Hartford.

C. H. Dexter & Sons commenced business in 1868 for the manufacture of Star Mill Paper and Manilla. The

business was established by C. H. Dexter, in 1836. Their main building is 100x30, 3 stories, with building adjoining 40x50, 2 stories. They employ 20 hands and turn out about 2,200 lbs. of paper per day. Their motive power is derived from 3 turbine wheels of 80 horse power combined.

D. & C. W. Holbrook commenced business in 1828 as manufacturers of school apparatus and furniture, in a building situated back of the village, 50x30, 2 stories, employing 20 hands. Motive power used, 10 horse turbine wheel. They make about 5,000 globes beside other articles per year.

The Medlicott Co. was established about 1864, by W. G. Medlicott for the manufacture of hosiery, mostly shirts and drawers.

In 1868 it was organized as a joint stock company, with a capital of $150,000. This company runs two mills here in this village. No. 1, is 159 feet long with two ells, 30 and 37 feet wide, the main building being 45 feet wide, built of brick: the building is principally four stories, including basement; dye house adjoining, built of wood, 50x30, one story. No. 2 mill, built of wood, 30x53, three stories. Employ in both mills 220 hands. This company run 42 knitting frames of various kinds; 2,600 spindles, using from 25 to 30,000 lbs. cotton and wool per week.

Their motive power is derived from Chase's turbine wheel of 75 and 50 horse power.

J. H. Hayden commenced the manufacture of sewing silk in 1838; his main building is 70x22, two stories; employs 15 hands, and turns out about 50 lbs. silk per week. For motive power, he has a five horse power turbine wheel.

At Rainbow, a few miles from the station, is the

Springfield Paper Co. This company was organized in 1864, for the manufacture of book, news and colored paper. O. H. Greeuleaf, President; H. N. Tinkham, Secretary. Office in Springfield, Mass., and Wm. L. Bidwell, Treasurer and Manager at mill. They employ about 40 hands on the average in the manufacture of printing papers, consuming about 700 tons paper stock per year, producing about 400 tons paper. The water power, from the Farmington river is one of the finest in the world. They have a water wheel of 100 horse power for driving their machinery.

At Rainbow, are Hodge, Son & Co., manufacturers of white and colored tissue paper. The business was established in 1860, and re-organized in 1866. They occupy a 4 story building with 3 wings 100x40 feet. Employ 14 hands, and produce $80,000 worth yearly.

At Sheffield, a few miles from this station, are the Eagle Mills Company was organized in 1846, for the manufacture of fine writing and map papers. W. B. Latham, Agent. Their main building is 2 stories front, 3 rear, 112 feet in length by 30 in width, with machine room attached 22x54 feet. On the west side of main building are the bleach room 15x30 feet; boiler house 10x36 feet; size room 12x22 feet; south of the machine room is the ruling room 16x10 feet; stock house 30x40 feet; store room and office 18x36 feet; lumber shed 18x40 feet. They employ 20 hands, producing about 100 tons paper annually, doing a business of $40,000. The motive power is furnished from a breast wheel, 12 feet diameter, under 6 feet fall, and a 10 horse engine made by Carpenter & Company, of Springfield, Mass.

Winnipauk, a small country station on the Danbury & Norwalk Railroad, about 2 miles from Norwalk.

Winsted, 62 miles from Bridgeport, at the terminus of the Naugatuck Railroad. A village in the town of Winchester, Litchfield County, located at the mouth of a lake which is from 3 to 4 miles in length and ¾ of a mile in breadth. The outlet of this lake presents a novel scene, it consists of a small stream compressed within a narrow channel and literally tossed from rock to rock till it unites with Mad river. Most of the manufacturing establishments here are located on or near this outlet upon which there are some of the best natural sites for hydraulic works in the state.

MANUFACTURES.

T. Hulbert commenced business in 1860, for the manufacture of bar iron, situated on Lake street. His main building 70x40, one story, contains 4 breast wheels for driving the hammers, two of 15 horse power, and two of 7 horse power; blacksmith's shop, 70x40, one story. Employs 25 hands, turning out monthly about 50,000 lbs. of iron.

Lathrop & Barton commenced business in 1863. Manufacture table and butchers' cutlery. Their works are quite extensive, occupying three buildings: 1st building 30x40, two stories, finishing and office; 2d building, 36x40, two stories, grinding; 3d building, 36x85, one story, forging. Employ 40 hands. They use about 25 tons steel, and produce about 3,000 dozen per year.

Clifton Mill Co., capital $35,000, manufacturers of mill stuffs and Wm. G. Coe's patent screw wrenches. Wm. G. Coe, Treasurer, Alvin Gilbert, President, and T. M. Clark, Agent. Building covers 200x40 ft., 3 stories; employ 60 persons. This company also owns the Winsted Hoe Co., which was incorporated in 1865, with a capital of $30,000. T. M. Clark, President and Agent. Manufacture Planter's hoes of every description: also, the "T. H. Witherby" edge tools, &c., &c. This company occupies 3 large buildings on the lake stream, and employs 65 hands. Are using 1 overshot and 2 turbine wheels, of the Dayton, Ohio pattern. Water power of the 3 shops, 95 horse; running 7 large grindstones, 15 polishing, 10 trip hammers, &c.

Gilman Carriage Co. Incorporated 1867. Capital $25,000. N. Adams, President; E. E. Gilman, Secretary; manufacturers of all kinds of carriages, building 133x33, wing 30x65, 3 stories, employ 50 hands, turning out 200 carriages per year. They use a 20 horse power turbine wheel to run their machinery. Manufactory situated on Main street.

Moore & Clark commenced business in 1866. Manufacturing carriage bolts and nuts, building 20x80, 1 story employing 30 hands, and turning out about 150,000 barrels of nuts per month. They use about 9 tons of iron per month. Shop situated on Main street.

Winsted Manufacturing Co. This company was incorporated in 1835, for the manufacture of edge tools, principally scythes. At the first meeting of the directors of the company held August 22, 1835, Theron Rockwell was chosen President; John Camp, Secretary; Lyman Case, Treasurer. August 29th, John Camp was chosen Agent at the mill, with a salary of $400 per year. At a meeting of the directors held Oct. 10, 1836, Theron Rockwell was chosen President, John Camp, Secretary and Treasurer. Oct. 24, 1839, Theron Rockwell, President; Norman Adams, Secretary and Treasurer. Oct. 19, 1840, Theron Rockwell, President; John Camp, Secretary and Treasurer. There were no changes in the officers of the company until 1848, when a meeting was called April 17, and Evert Bevins was elected President, vice Rockwell, deceased.

These same officers commenced to hold the positions of President and Secretary, until September 29, 1851, when Rufus Holmes, was chosen President in place of Evert Bevins, resigned; September 26, 1853, Charles Reynolds, elected President; September 24, 1855, George Dudley, elected President. In 1861, John Camp, after being Secretary and Treasurer of the company for 26 years, died, and August 25, 1862, William C. Phelps, was appointed Secretary, *pro tem*; August 30, 1863, Joseph H. Norton, appointed Secretary and Agent, which office he now holds; March 19, 1864, special meeting was called, and George Dudley, appointed President; in August, 1865, E. Grove Lawrence, was appointed President, vice Dudley resigned; Mr. Lawrence, held the office of President until August, 1867, when William S. Gilbert was appointed President, and J. H. Norton, Secretary and Treasurer.

Their main building, situated on North Main street, is 130x48 feet, 2 stories, built of brick and stone, with a building attached, 100x20 feet, where they polish and finish scythes. Forging done in building 60x35 feet; 100 horse power turbine wheel. They manufacture about 7,000 dozen per year, using about 15 tons of iron, &c; employing 30 hands.

New England Pin Co., situated opposite the depot; incorporated in 1857; capital $100,000; James R. Keeler, President, G. Wetmore, Secretary and Treasurer, for the manufacture of solid head pins, worsted braids and shoe laces. Their power is derived from a 30 horse turbine wheel. Mill building 80x40 feet, 3 stories; employing 60 hands; using about 10,000 lbs. of brass, 4,000 lbs. combing wool and 3,000 lbs. cotton per month, making about 500 packs of pins, 300 dozen braids and 300 gross laces per day.

Winsted Foundry and Machine Co. Incorporated 1851. Capital $15,000, George Taylor, President, Charles Alvord, Secretary. Manufacture principally to order, castings, and machinery; building 100x50, 2 stories, employing 12 hands. A 30 horse power turbine wheel, gives all the power required to run 2 planers and 6 lathes.

Strong Manufacturing Co. Incorporated 1865, with capital of $16,000. William L. Gilbert, President, C. Strong, Secretary and Agent; manufacture table and tea spoons, also, coffin trimmings; building 60x30, 3 stories, employing 50 hands. They use about 300 pounds Britannia and 500 pounds composition of lead, &c., and turn out 12 gross spoons, and 30 dozen pair handles per day.

W. Stickney, manufacturer of carriages. Commenced business 1867, employs 12 hands, and makes about 30 carriages per year. He does mostly jobbing work, building 40x50, 2 stories.

Thayer Scithe Co. commenced business in 1867, as successors to W. Thayer & Co., for the manufacture of scythes, hay knives, &c. Employ 15 hands; they use about 35 tons iron, 7 tons edge steel, and two tons back steel; also, 125 tons coal, and make about nine thousand dozen scythes per year. They have three buildings, viz.: No. 1, 40x60, forging shop, 1 story. No. 2, 20x30, grinding shop, 1 story. No. 3, 20x30, polishing and finishing, 2 stories. They have one 57 horse power turbine wheel, for driving trip hammers and grindstones, and one 10 horse power turbine wheel for polishing, twisting straw, and strawing up scythes.

Beardsley Scythe Co., situated on Meadow street, E. Beardsley, President, F. Brown, Agent, E. R. Beardsley, Treasurer and Secretary; capital $25,000. Manufacture scythes; employ 40 persons; use about 100 tons steel and turn out about 8,000 dozen per year; their works comprise 4 large buildings.

J. S. & J. T. Rockwell, manufacturers of sheep leather of every variety. Commenced business in 1842, on Main street, building 170x45 feet, 3 stories; employing 14 hands, and turn out about 65 skins per day, using from 400 to 500 tons of hemlock bark per year. They derive their power from a 10 horse power breast wheel. Office 47 and 49 Ferry street, New York.

Empire Knife Co., incorporated in 1849, Beardsley & Almond being the firm. Manufacturers of pocket cutlery, shears and scissors; building 90x20 feet, 2 stories; finishing and packing. Forging, hardening and grinding done in small outside building, so as not to endanger their main works in case of fire. Employ 50 hands, and turn out about 750 dozen per month. Power, wood breast wheel of 40 horse power.

George Dudley & Son, situated on Main street. Commenced business 1867, manufacture imported sheep skins, for book-binders' use; building 111x42, 4 stories, used for tanning, scraping, packing, &c., also, 2 buildings 35x40 each, 3 stories used for drying, employ 25 hands, and turn out about 20,000 dozen per month, using 500 tons bark per year; power, 15 horse power breast wheel.

They also have a branch tannery at Barkhamsted, Conn. about 7 miles from Winsted, size of building 60x30, wing 50x30, 3 stories; employing 6 hands. Use about 120 tons bark per year, and turn out about 7000 dozen skins. Use a 10 horse power breast wheel.

Gilbert Manufacturing Co., situated on North Main street. Incorporated in 1866, with a capital of $60,000. George B. Owens, President; J. B. Woodruff, Treasurer. Manufacture clocks of all kinds; building 170x30, three stories, and employ 100 persons. Their works are run by a 40 horse power turbine wheel. Manufacture about 3,500 clocks per month.

R. Cook & Sons, commenced business in 1839, manufacturing all kinds of axles, crowbars and sleigh shoes; mill situated on North Main street, and is 75x35, three stories high; employing 15 hands. Their forging is done in two outside buildings, 35x40, one story each. They use about 8 tons of iron, producing from 4 to 5 set of axles per month. Power derived from 2 float wheels, of 25 horse power, and one breast wheel of 40 horse power.

Yalesville, is a village of about 100 inhabitants, located about 3 miles from Meriden, and 15 from New Haven, on the New Haven, Hartford and Springfield Railroad.

The Eagle Auger and Skate Manufacturing Co., is located about 40 rods from the depot. This company commenced the manufacture of augers and skates, in 1863, as successors to N. G. Sanford & Co. They occupy a main building 90x40, 3 stories, with a wing 100x30, 2 stories. They employ 60 persons, and consume about 4 tons of iron, and steel per month. The power is furnished by 2 iron wheels, with a capacity of about 125 horse power, having 8 feet fall, being located on the Quinnipiac river. The proprietors are Hull Clark, James C. Wilson, and Edward H. Tracy, their warehouse is at 81 Beekman street, New York.

G. I. Mix & Co., commenced in 1856, the manufacture of a general assortment of iron, Britannia and plated spoons, tinned iron hollow ware, &c. The manufactory is located about ½ mile from the depot, the main building being 96x34 4 stories, built mostly of wood, basement of stone. A casting shop 80x20, 1 story, and other small buildings. They employ 100 persons when in full operation. The motive power is furnished by a Kilbourn, Lincoln & Co.'s, wheel, the fall here being 10 feet, with a capacity of 150 horse power. The company consume 1200 pounds of block tin

per day; $30,000 worth of tinned iron plates per year imported by them from England; $15,000 worth of sheet iron and the same of iron wire annually. Do a business of about $170,000 per year. Salesroom 83 Beekman street, New York.

YANTIC, 17 miles from New London, and 4 from Norwich. A station located in the town of Franklin, on the New London and Northern Railroad.

YANTIC WOOLEN MILL, E. Williams, proprietor. Established in 1824. Run 10 sets machinery; 7 sets now running on flannels of every description. The power is supplied by a Swaine iron turbine water wheel, under 14 feet of fall.

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ADDITIONS, &c.

BIRMINGHAM. THE HOWE MANUFACTURING CO., established in 1835, by Dr. John J. Howe. They occupy a building 140 feet long, and employ 50 workmen. The power is furnished by a 40 horse power engine. Their manufactory is located on the Naugatuck river, with a fall of 12 feet. Their agents are located at No. 180 Chambers street, New York,

ROBERT MAY, manufacturer of hoop-skirts, and importer of seamless kid gloves, occupies a 3½ story building 80x40 feet; employs 60 hands, doing a business of $100,000. Established in 1864.

DOWNS & BASSET, established business in the year 1857, for the manufacture of hoop skirts. They occupy a 3 story brick building 98x35 feet. The average number of employees is from 50 to 96, making 400 skirts daily, and doing a business of from $150,000 to $200,000 per annum.

SHELTON & OSBORN MANUFACTURING CO. Manufacturers of hardware, stationery and skirts. The business was commenced in 1837, but was established by the present company in 1854. They occupy buildings of the following sizes: 9x30 feet, 4 stories, and one 38x20 ft. 2 stories. They employ from 80 to 125 hands, and sell goods to the amount of $176,000 yearly; they use water power.

WESTVILLE. E. P. MERRIAM, commenced business in 1834, for the manufacture of blind and window trimmings, occupies a building 60x22 feet, and employs from 6 to 8 hands.

DANBURY. TWEEDY & CO., fur and wool hat manufacturers, were established by Samuel Tweedy in 1801. They occupy 5 buildings situated on the Still river. Use 3 steam engines built by the Pacific Iron Works Co. of 60 horse power each, and 1 25 horse power, 4 Lowe's patent boilers of 60 horse power each, and 1 flue boiler of 40 horse power supplies the steam. They employ 700 hands and produce on an average 250 dozen per day. This establishment is one of the oldest and most successful in their line of business of any similar concern in the United States. Salesrooms 100 and 102 Grand street, New York.

ASK FOR "CROSBY,"

—WITH—

HIXON, BIRNIE & SHAW,

—MANUFACTURERS OF AND WHOLESALE DEALERS IN—

BOOTS AND SHOES,

93 MAIN STREET, - SPRINGFIELD, MASS.

"SO SAY WE ALL OF US."

STOP AT THE

TREMONT HOUSE,

When You Visit

NASHUA,

New Hampshire.

CITY HOTEL,

P. W. HAZELTINE,

PROPRIETOR.

Manchester, N. H.

NEW YORK.

GOLD SPRING, Putnam County. WEST POINT FOUNDRY, Paulding, Kemble & Co., proprietors, was established in 1817. They occupy buildings covering upwards of four acres of ground, and manufacture heavy machinery and castings, of all kinds; marine and stationary engines, cast iron water pipes, &c. &c. Also, manufacture castings from gun iron of a guaranteed strength of 30,000 lbs. per square inch.

The business was formerly carried on by R. P. Parrott, who was succeeded by the present firm November 1st, 1867.

This firm employ, from 350 to 1,000 persons, and turn out annually from 4,500 to 10,000 tons of machinery, doing a business of from $650,000 to $1,500,000. Their machinery is driven by five ordinary high pressure steam engines, making a combined power of 150 horse; also, an over-shot water wheel of 50 horse power. G. Paulding and G. Kemble, Jr. at the works, and J. N. Paulding and Peter Kemble, at the office, No. 30 Broadway, New York, constitute the firm.

NEWBURG. QUASSAICK WOOLEN MILL Co. This company was established in 1865. Their mill is 150x45 feet, three stories high, and is situated on the Quassaick creek, about one half mile from the Hudson river. They run 4 sets of machinery, and 17 broad looms, and manufacture kerseys, horse blankets, and brown gray blankets; employing from 50 to 60 persons, and producing from 300 to 600 yards goods daily, doing business of from $75,000 to 100,000 per year, their machinery is driven by water wheels, under 16 feet fall, the power used being 60 horse. Townsend & King, 81 North street, are agents for the sale of their brown gray blankets. Their horse-blankets are sold by themselves. E. Haigh, Esq., is manager of this company.

VALLEY WOOLEN MILLS, Haigh & Mellor, proprietors. The mill which is located on the Quassaick creek, one half mile from the Hudson river, was established about ten years since, and came into the hands of the present proprietors in 1868. The buildings occupied by them are as follows, viz.: mill, 96x36 feet, 4 stories high; a rag house 60x40 feet, 1 story, which contains 2 rag pickers, for making shoddy of all kinds and qualities; also, a store house, dye-house, &c. This firm are manufacturers of fine horse kerseys, and collar checks. They run 3 set of cards, and 12 looms, employing from 25 to 35 persons. Their machinery is driven by water wheels of 60 horse power, under 16 feet fall. Office in Newburgh, New York.

NEW YORK CITY. THE LODI MANUFACTURING CO.: Office 66 Courtlandt street, was established in 1840. Their works are located on the Hackensack river, midway between the New Jersey Railroad and the Newark Plank Road bridges, three miles from New York by land and 15 by water, and comprise the following buildings:

No. 1, 250x55; No. 2, 200x40; No. 3, 150x50; No. 4, 100x40; No. 5, 100x20; No. 6, 100x40; No. 7, 100x70; and 20 dwelling houses. They have nearly 2,000 ft. of dock frontage, vats large enough to hold 20,000 tons of night soil, obtained in New York and Jersey City, (the company having contracts for several years, for removing the same.) The drying floors cover over six acres of ground, and 7,000 to 10,000 barrels are frequently dried in three days. They employ 250 persons, producing 1,000 bushels of pondrette, bonedust, and superphosphate daily, doing a business of $300,000 per annum.

THE LAWRENCE CEMENT CO. was established in 1848. These works are located at Kingston and Rosendale, Ulster county, N. Y., the business being at 68 William street, of this city. The manufacturing buildings comprise a store house 50x110 feet, engine and boiler house 40x40 feet, cement mill 30x40 feet. The company employ 100 persons, manufacturing about 500 barrels a day for nine months in the year, (the works not running in the winter.) A 100 horse power Woodruff & Beach engine, of Hartford, Conn., supplies the power. This Company have the most extensive and best quarries in the State. The cement is made the standard at Brooklyn Navy Yard. They make about 110,000 barrels annually.

STOCKPORT. R. REYNOLDS' Empire Loom works, Stockport, Columbia County, N. Y., are situated near the confluence of the Claverack and Kinderhook, the united streams forming an important tributary to the Hudson River, 4½ miles north of the city of Hudson, and 1½ miles from Stockport station, on the Hudson River Railroad, and manufacture Empire Power looms, considered by those using them to be the best, most durable and fastest looms in the world. There are 8 sizes built—20, 25, 30, 36, 40, 46, 50 and 60 inch, and of each size there are plain, and from 3 to 6 leaf twills, for light or heavy goods. The most improved let-offs are attached. The business was established in 1850 by R. Reynolds.

The main building is a handsome brick structure 270x40 feet, with 2 high stories, amply lighted with French windows. This building has 2 fine towers of brick, at which, by

EMPIRE LOOM WORKS, STOCKPORT, COLUMBIA CO., NEW YORK.

R. REYNOLDS, Proprietor.

The manufacture of the

EMPIRE POWER LOOM

is made a specialty at these works. This loom is universally acknowledged to be the best, most durable, fastest, and easiest managed for Plain and Twill Goods, either Cotton or Woolen, in the world. It took a bronze medal at the New York World's Fair, and silver medals at the Fair of the American Institute, New York, and that of the Franklin Institute, of Pennsylvania. There are establishments running 5000 of these looms. Complete illustrated circulars with diagrams of all parts, and full descriptions and explanation, will be sent gratis on application.

means of hoisters, the machinery is received and discharged. The manufactnring grounds contain about six acres, upon which are located 5 other large brick and stone buildings, comprising a brass and iron foundry, forging shop, trimming room, pattern room, &c. There are employed at these works 150 persons. The machinery comprises all necessary for a well-organized establishment for the purpose designed. Fifty tons of pig iron, 10 tons bar iron and 5,000 feet of lumber are consumed monthly, the number of looms turned out in the same time being 150. Their machinery is driven by one 4 feet turbine, and one of 3½ feet, making a combined power of 50 horse, built by J. P. Collins, of Ida Hill, Troy, N. Y. The fall here is 17 feet. The work is conducted through 11 departments, each under the charge of the general superintendent. The surroundings of the works are extremely beautiful, and a large amount of water power in the immediate vicinity is either only partially or not at all occupied.

PENNSYLVANIA.

PHILADELPHIA. The Philadelphia Star Carriage and Tire Bolt Works, of which Messrs. Townsend & Hubbard, are the proprietors, was established in 1866. Their works are located on Cherry street, west of 23d, their lot being 150 ft. square, and is in part covered with buildings. They manufacture carriage and tire bolts of all the various kinds in use. Store bolts and rods, bolts for plows, mowing machines, and all kinds of agricultural implements, clips, &c., warranting all goods manufactured by them to be excelled by no others. Their machinery has been built entirely by themselves, the inventions of one of the proprietors, and is considerably superior to anything in use for their business. They turn out annually from four to five millions of bolts with their present facilities. In a word, their establishment, although not one of the most extensive, is one of the most complete of its kind in machinery, and its appointments, in the United States.

READING. The Reading Hot Pressed Nut Works were established about three years since by the present proprietor, J. H. Sternberg. He consumes nearly 1,000 tons of bar iron per year, and employs about 30 men. A 60 horse power engine supplies the impetus for the machinery. The buildings are 40x160 feet with engine house, blacksmiths' shop and office attached. His hot pressed nuts are made by different kinds of machines of his own patents, and are said to be unexcelled.

HAWLEY, FOLSOM & MARTIN,

Successors to F. A. Hawley & Co.

JOBBERS AND MANUFACTURERS

—OF—

GENTS' FURNISHING GOODS,

15 OTIS & 24 ARCH STREET, BOSTON.

OHIO.

CINCINNATI. Hartmann, Laist & Co. occupy about 19,000 square feet of land on which are located several buildings, one, two and three stories in height, situated at No. 53 West Second street, and used in the manufacture of white, chemically pure, and inodorous glycerine. They commenced business in 1863, and have about 25 employees, producing daily 2,000 lbs. of glycerine, and doing business to the amount of $150,000 per annum. The growing demand for their glycerine has induced them to increase considerably their manufacturing facilities, so as to enable them to execute with promptness and dispatch orders for any quantity. It is obtained by a new process of distillation, and is warranted to be in every respect equal to the best manufactured in Europe and in this country. It is perfectly white, inodorous, of full specific gravity, and chemically pure, being entirely free from metallic impurities, alkali and lime, and is specially adapted to medicinal purposes. A 20 horse engine supplies the motive power.

DAYTON. S. N. Brown & Co., manufacturers of carriage wheels, hubs, spokes and bent material, occupy a factory building 215x60 feet, 5 stories and built of brick; also brick warehouse, 150x60 feet, 3 stories. The business was established in 1847, and the company incorporated in 1869. They have employed in their factory 85 persons, besides 13 in getting out lumber and timber, and do business to the amount of $175,000 per annum. Their goods are sold in all parts of the country from Maine to California, and in England and Prussia. This firm were awarded the first premium for goods displayed at the World's Fair in London, in 1862. An engine of 100 horse power drives their machinery.

SPRINGFIELD. Thomas & Mast, manufacturers of the "Buckeye" grain drill and grass seed sower, "Buckeye" cider mill and press, "Buckeye" riding cultivator and triumph mower. They occupy a machine shop 415x50 feet, three stories high, and foundry 150x100 feet. The business was established in 1856, and now gives employment to 225 persons, producing on an average 28 machines per day, valued at about $70 each. The amount of business done by them being about $500,000 annually. Their machinery is driven by water power.

TIFFIN. Tiffin Agricultural Works, office and works south end Main street, were established and incorporated under the laws of Ohio, Feb. 11, 1865. The buildings cover an area of about 16,000 square feet. Manufacture agricultural implements and machinery; hands employed average 40; a 40 horse power engine supplies the power. The annual sales amount to about $80,000 on an average. They are about fitting up new works and increasing their capital which is now $50,000, to $200,000; are running very light at present, manufacturing revolving horse rakes. A. T. Barnes, President; E. C. Umsted, Secretary; N. M. Barnes, Superintendent.

HARTMANN, LAIST & CO.,

MANUFACTURERS OF

WHITE, CHEMICALLY PURE AND INODOROUS

GLYCERINE,

53 West Second Street, Cincinnati, Ohio,

Have continually on hand the above article suitable for druggists. Also, Glycerine for manufacturing purposes and gas meters. Samples furnished on application.

Agents: { LONGHURST & LAUER, 52 Cedar street, New York.
WM. GULAGER, 59 North Front street, Philadelphia.

ADDITIONS, ALTERATIONS AND CORRECTIONS.

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MAINE.

SACO RIVER STATION. Bar Mills. The firm of S. H. Berry & Son was established by S. H. Berry, in June 1833. The buildings are 26x60, 2 stories, and 30x40, 1 story, which contains gang and single saws and heading machines. They manufacture sugar and molasses head, sugar box shooks for the Cuba market, small boxes for packing preserved fruits and meats and boot and shoe boxes. Use about 80 horse power with facilities for 250. Employ about 25 persons.

KENDALL'S MILLS. C. K. Foss occupies a building 40x55 with ell 32x36; together 3 out buildings for housing lumber for the manufacture of curtain sticks, commencing here in 1860. He employs 8 persons; consumes 2½ thousand of stock and produces from 10 to 15 gross daily, doing a business of $20,000 annually. He uses 15 machines for planing, &c.

Benj. Bunker & Co., manufacturers of match cards, bungs and plugs, for beer, fish, flour, syrup and molasses barrels, commenced business in 1868. They occupy a building 40x85, 2 stories, 2 dry houses 13x20 each and a dry shed 100x15. They employ 16 persons, consume 1,000 cords of pine wood and 200,000 feet of boards for cases yearly, producing 450 gross of match cards daily, requiring $650 worth of stamps daily to meet the requirements of the revenue law. They do a business of $250,000 yearly, producing about 150,000 gross of sawed match cards and 5,000,000 bungs and plugs. The buildings, said to be the largest of their kind in the United States, are located on main dam at head of an island. Power obtained from 2 centre-vent water wheels 30 and 40 horse power each, under 8 feet fall of water. Market, Boston, New York and Southern cities.

Tukey & Jakins, manufacturers of curtain fixtures, curtain slat and nursery stick. This establishment was the first of the kind introduced in the State of Maine, by Foss, Owen & Co. in 1858. Since which time many similar manufactories have grown up around them. This firm now manufacture about 150,000 curtain fixtures of different styles, 150,000 rolls and slats for the trade, 500,000 curtain slats and 50,000 nursery plant sticks per annum. They employ 5 persons on an average, consuming yearly 275,000 feet of lumber.

C. & J. M. Fogg, were established by C. Fogg, in 1840; J. M. was admitted in 1865. They manufacture 3,000,000 feet per annum of pine and spruce lumber and sometimes hemlock, 1,000,000 lathes, 100,000 shingles, 100,000 clapboards, doing a business of about $50,000 annually; employ about 30 persons.

NEW GLOUCESTER, 38 miles southwest from Augusta and 23 north from Portland, a station and town on the Grand Trunk Railroad; a pleasant and flourishing town, incorporated 1774. It is well watered by Royal's River; the soil is fertile.

New Gloucester has 9 powers or more. Eight of the above are situated on Royal's River, and all within a running distance of ¼ of a mile; total descent, 50 feet. The power is only partially improved in mills, their character not stated; centre-vent wheels employed.

Some small ponds are connected with the stream which can be used for reservoirs. The improvement of the power has operated favorably for the wealth of the town. One power on Lovewell's brook.

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NEW HAMPSHIRE.

ALTON. C. C. Mooney, manufacturer of shoes, occupies one building 30x70 feet. He employs 50 workmen and produces 90,000 pairs of shoes yearly, doing a business of $120,000

CLAREMONT. Sugar River Mill Co., incorporated and business established in 1856, with a capital of $100,000. The building is on Main street, built in the most substantial manner of brick with stone basement, 5 stories high with slated roof. It is 48x64 feet, eight run of Burr stone, and built for a first class mill, with all the modern improved machinery for the manufacture of flour and meal. Employ 7 hands. Capacity of flour department, 100 barrels per day. The machinery is driven by water power, with 14 feet fall, "Tyler wheel" used. They have a store house opposite 25x50 feet, built of wood, and located near the railroad station of "Claremont." Adjoinin the flour mill and part of the same property is a two story and half saw, sash and planing mill 75x35 feet. The mill is leased to Messrs. Richardson & Co., who occupy and run said mill. Employ 6 hands and manufacture annually nearly a million feet of lumber. They have a

large lumber yard with suitable buildings and appurtenances for keeping on hand a full supply of building materials, including laths, shingles and clapboards.

DIMOND'S CORNER, 14 miles from Concord. A country station in the town of Warner, on the Concord and Claremont Railroad.

FARMINGTON. E. C. KINNEAR, established business in 1857 for the manufacture of shoes. He occupies 2 buildings, employs 150 hands and produces 140,000 pairs yearly. Amount of business per annum, $225,000.

HINSDALE. PLUNKET WOOLEN CO. commenced business in 1861. They manufacture cotton warp, cloths and satinets. The factory is located on the east branch of the Housatonic; the power is furnished by 1 breast wheel and 2 Collins water wheels.

NEWMARKET. NEWMARKET MANUFACTURING CO. This company was established in 1823 and are running three mills 150x50 feet each, built of stone, 5 stories high, containing 25,000 spindles, 600 looms, employ 400 hands, and produce annually 4,500,000 yards sheetings, shirtings, drillings and cotton flannels. The power is furnished from 2 turbine wheels (one American turbine, the other Kilburn & Lincoln, of Fall River,) under 20 feet fall. This summer this company will build their fourth mill, of stone, 3 stories high, 262 feet long by 60 feet wide, thus increasing their spindles 1,200, and looms 250. Geo. W. Frost, Agent at the mill.

NORTH PELHAM, six miles from Nashua, New Hampshire. At this place is the BEAVER MILLS, situated on the Beaver river. They were established in 1866. The mill is 50x60 feet, 3 stories manufacture flannels. Employ 25 persons; run 12 broad looms, 2 sets of machinery, turning out 1000 yards daily, and doing a business of about $75,000 per year. A 25 horse engine supplies the power, assisted by a water wheel. The fall here is 10 feet. Charles H. Wyman & Company, proprietors.

RAYMOND. E. T. NUTTER & Co. commenced business in Dec., 1868, for the manufacture of pine and oak lumber, The buildings occupied by them, together with some improvements cost $40,000. They occupy 3 mills, 2 of which are used in which to saw out oak staves for hogshead shooks, about 4,000 of the latter being produced daily. These latter are made chiefly for the West India trade. One mill is used for making sugar box shooks. They have a cooper shop 28x45 feet, with machinery in it. The mills are of the following dimensions, one 25 x40 feet, 2 stories; one 18x60 feet, 1 story; one 20x50 feet, 1 story. They employ from 30 to 40 men. They had a 2 story building constructed 28x40 feet, with basement for store and an ell 20x36 feet, costing $4,000. These with several other buildings comprise their manufactory.

SUNCOOK. WATTLES & BOND commenced business in 1866, for the manufacture of beam and skein yarns and bandings. They occupy one building 50x30 feet, 3 stories high. Employ 18 hands; run 800 spindles and produce 250 lbs. daily; doing a business of $30,000 per annum. The factory is located on Suncook river, having a fall of 11 feet. They consume 300 lbs. of cotton daily. R. B. Smith & Co., Boston, are agents.

VERMONT.

BETHEL. E. T. BUGBEE, occupy a main building 100x30 feet, 3 stories, carrying shop, 40x 26, 2 stories, two wings 100x26 and 70x22, 2 stories, store house 50x30 3 stories, and another house 30x18, all built of wood, for the manufacture of hides, calfskins, lealeather, &c. They employ 25 persons, produce 200 sides of leather per month, 200 sides of calfskins, and 3000 sheepskins. A 30 horse power engine made by the Swampscot Machine Co., of Swampscot, New Hampshire, supplies the power. The establishment is situated on the White river, all the goods are sold in Boston. The business was established, and the main building erected in 1865. The present joint stock company was founded in 1868, for the purpose of carrying on the wool pulling and tanning business, and they claim to have the largest and best facilities for business in the State. The works have recently been enlarged and improved, with ample means for handling 100,000 pelts, and 5000 hides per annum.

FAIRFAX. JAMES ANDERSON & SON were established in 1867. The main building is 40x60 ft. with dye house attached, 18x12 feet. They employ 12 hands, run 420 spindles, 4 looms and 1 set of machinery, manufacturing about 100 yards of woolen goods and flannels daily. The mill is situated on Stony Brook, and has a fall of 30 feet. They do a business amounting to $5,000 annually.

RICHMOND. R. A. JONES established business in 1852. He occupies a one story building 70x24 feet, for the manufacture of rough slaughter, kip, calf and upper leather, and boots and shoes. Employs 4 men, and does a business of $14,000 per annum. His machinery is run by water power, with wheel under 10 feet fall.

WEST RUPERT, 38 miles from Rutland and 48 from Troy. A flag station on the Rensselaer and Saratoga Railroad, Rutland and Washington Division, in the town of Rupert.

MASSACHUSETTS.

BEAVER BROOK. A country station on the Lawrence Branch Railroad.

BOSTON. Joseph F. Paul & Company. Office 441 Tremont street. Occupy about 2 acres of ground for the manufacture of mouldings of every description, for houses and frames. The business was established about 1848, by Joseph F. Paul. They have two engines of 180 horse power combined. The firm are also engaged largely in the lumber business, amounting to $800,000 annually.

E. H. Ashcroft, occupies 3 floors in a 4 story brick building, located at 51 and 53 Sudbury street. He commenced business in 1852. Employs 30 hands. Runs a 25 horse power engine, manufacturing steam and water guages, making about 3,000 annually, doing a business of $100,000.

EAST BLACKSTONE. Ballou & Worrall. Business established 1864. Occupy a 3 story building 34x86 feet, for the manufacture of denims, cotton duck and satinet warps. Employ 30 hands; consume 2,000 lbs. cotton, and produce weekly about $1,200 worth of goods, doing a business of $150,000 per annum. A Putnam's 25 horse power engine, and a Leffel 30 horse power water wheel under a fall of 30 feet, supplies the power.

LOWELL. Taylor & Barker commenced the manufacture of all kinds of chemicals for dyers and calico printers in 1867, making a specialty of pyroligneous acids and its compounds. The business was established by O. M. Whipple, some 40 years ago. The building is 160x50, 1 story, situated on Lawrence street. Employ 15 hands; consume 1,500 cords hard wood per year, besides indigo acids, pig tin, &c.; producing 3,000 gallons acids per week. Motive power furnished by the Wamesit Power Company.

White, Brothers & Kilburn commenced the manufacture of gloves, mittens—buck, calf, &c., in 1865. They occupy a floor in John Nesmith's building, a tannery on Howe street, and factory at 67 East Merrimac street. Employ 25 hands. Salesroom 143 Summer street, Boston.

NORTH HARWICH. A sea coast town, situated about half a mile from the depot, 88 miles from Boston, and 5 from Orleans, containing about 200 inhabitants, on the Cape Cod Railroad.

ORANGE. In the year 1843, Rodney Hunt, Esq., senior partner of the firm of Hunt, Waite & Flint, commenced the millwright business in Orange; at that time making the manufacture of breast water wheels a specialty, and it may safely be said that he has put in as many breast wheels as any other builder in New England. This business soon led to contracting for building and furnishing throughout cotton and woolen mills.

With an increase of business, an increase of facilities was required. So numerous improvements and extensions have been made, and the business of the establishment is now managed by three partners, the style of the firm now being Hunt, Waite & Flint. Beside the manufacture of first class breast and turbine water wheels, which so long and extensive experience has enabled them to secure, the business now comprises the manufacture of woolen machinery, and wood working machinery; furnishing also, shafting pulleys and gearing. The manufacture of their patent rotary fulling mill is a specialty with them, having made nearly 3,000 of them, and sending to all parts of the country. They have also, recently procured a patent on Hunt's improved double acting turbine water wheel, which is regarded one of the most economical and powerful wheels in use. There is a foundry connected with the establishment, melting some 800 tons of pig iron annually. The works are driven by water power and give employment to about 100 men.

PALMER. Loomis & Page, manufacturers of all descriptions of carriages and sleighs. The business was established by Nehemiah Smith, about 20 years ago. There are now used three buildings, the main one being two stories high, built of wood, 60x40 feet; the second, two stories, 40x30 feet, built of wood; the third, also of wood, is used for a repository, being 60x35 feet, one story. The principal work is light driving carriages, which are made very nicely, and from appearances as good in all respects as can be found in any manufactory. Thirteen hands are employed, all first class workmen.

READING. D. F. Weston, shoe manufacturer. Established the manufacture of ladies', misses', and children's shoes in 1835. He occupies one building. Employs from 40 to 50 persons, runs 4 Singer sewing machines. His work is light and all made by hand.

RUSSELL, situated 8 miles from Springfield, 116 from Boston, and 84 from Albany, on the Boston and Albany Railroad. A village of about 400 inhabitants, 2 churches.

SOUTH HINGHAM. Joseph Jacobs & Son, manufacturers of edge tools. The business was established by Joseph Jacobs in 1838. They occupy two buildings, one 24x52 feet, the other 22x40 feet. They employ 13 hands, and do a business of from $20,000 to $25,000 yearly. They are located at Wilder's Pond, South Hingham; use water power, and have 20 feet fall of water.

THORNDIKE. Thorndike Company established business in 1836, for the manufacture of cotton goods, denims, stripes, ticks, sheetings, &c. There are two buildings in use, one 160x48 feet and the other 216x50 feet. The employees number 400, run 500 looms and 26,000 spindles, and produce 18,000 yards of goods daily. The amount of business per year is $550,000. The factory is located on Ware river and has 20 feet and 14 feet fall of water; 550 horse power. J. S. & E. Wright & Company are Agents in New York and Boston.

WRENTHAM. William E. George commenced the manufacture of straw goods in 1853. He occupies, at present, a building 200x42 feet and wing about 50 feet square, 2 stories and basement. Employs in the shop from 50 to 75 men and about 100 girls, and from 600 to 700 females outside. The buildings are heated by steam from two 45 horse power boilers.

H. K. Fisher occupies a 3 story building 100x40 feet, for the manufacture of boots, shoes and brogans. Employs 60 hands; produces 45,000 pairs per annum. Business established in 1865.

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